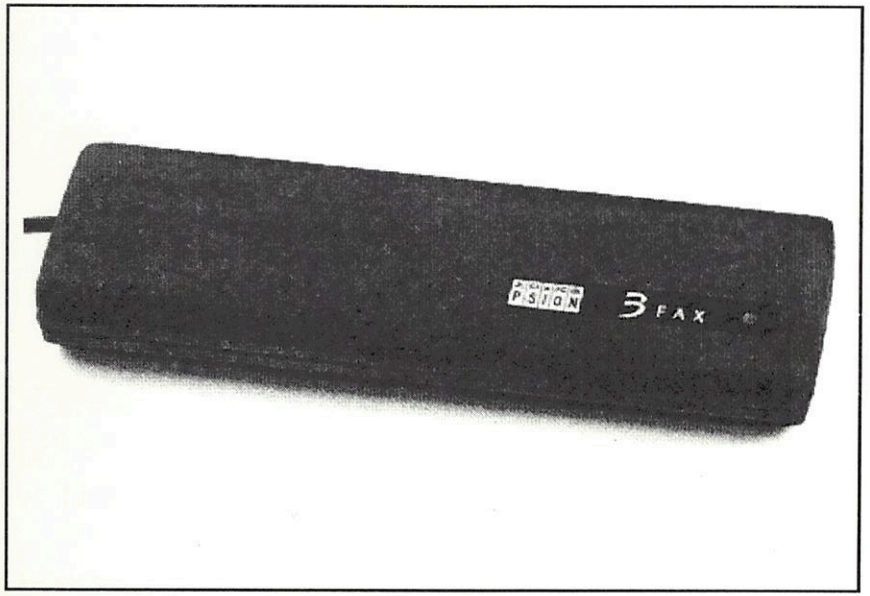
Second printing - by DS Litho Lithographic printers, Tel/fax (01869) 320687

Palmtop

The journal for Psion Series 3 and 3a users

Issue 3, Volume 1 May / June 1995



News, reviews, gossip, feature articles, programming, letters, hints & tips, tutorials and more...

...60 pages of up-to-date information on your favourite PALMTOP computer!

Contents

3 **Editorial**
Spreading the word...

4 **Palmtop News**
Rumours and forthcoming attractions in the Series 3/3a world

6 **Readers' Letters**
More of your comments and gripes

10 **A Closer Look**
Some quick reviews of the latest new products

20 **Macros on the Series 3a**
An introduction to the power and flexibility of the macro

26 **Money, Money, Money!**
Steven Shone reflects on his favourite software...

29 **Programmers' Workshop**
More OPL wisdom from Andrew Baldwin

34 **Living with the 3Fax**
Everything you ever wanted to know about Psion's own fax modem

38 **The Emulation Game**
Pete Sipple tells how to use a PC emulator with your Series 3 or 3a

43 **"On The Net"**
Pete's regular roundup of Internet gossip

49 **Something to DRAW on...**
A look at some of the numerous drawing packages available for the S3/3a

58 **Hints & Tips**
More efficiency boosters for your palmtop

Palmtop
The journal for Psion Series 3 and 3a users

Thanks...

Special thanks for this issue go to Joe Odukoya at Psion for kindly supplying copies of *SoundMaster* and *ODE*.

Thanks also to all the contributors whose names appear within the magazine, particularly Andrew Baldwin for his regular programming articles and Pete Sipple for his numerous contributions and endless help and encouragement on the project. Also not forgetting my girlfriend, Rosemary, for so diligently proofreading the entire content of the magazine.

Address

All requests for subscriptions or back issues and any comments or criticisms regarding the content of *PALMTOP* should be directed to the editor at the following address:

Steve Clack
25 Avocet Way
Bicester
Oxon OX6 0YN
ENGLAND

alternatively, telephone or fax on +44 (0)1869 249287
or: e-mail sclack@cix.compulink.co.uk
or: 100602.3723@compuserve.com

Submissions

Any contributions of material published within the pages of *PALMTOP* (excluding 'On The Net') will earn the author one free issue added to their subscription. If you wish to write feature articles for the magazine then please contact the editor to discuss your ideas. Any articles over 1000 words in length will earn one year's extension to the author's subscription, or a minimum payment of £20 (or foreign equivalent).

Back Issues

Back issues of *PALMTOP* are always available at £4 each within the UK, £5 each elsewhere. Just send payment in the usual way, stating which issues you require.

Subscriptions

PALMTOP is available by subscription only from the address given above, price £24 within the UK, £27 in Europe and £33 worldwide. Price covers 6 issues and all postage (and airmail costs for European/worldwide subscriptions). VAT is not payable on *PALMTOP*.

Payment for subscriptions or back issues can be made by cheque or Money Order (payable to '*PALMTOP*') in UK FUNDS ONLY. Payments can also be made using VISA, MASTERCARD, DELTA, ACCESS and SWITCH cards. Please call, fax, post or e-mail your card details.

General

PALMTOP acknowledges that some of the names referred to within the magazine are registered trademarks.

Editorial

It's been another wild couple of months. Subscriptions have more than trebled since the last issue, and we now have readers in more than 20 countries spanning five continents.

Palmtop is also now produced using *QuarkXPress*™ desktop publishing software, rather than the 'budget' package used to lay out the first two issues. Although issue 3 looks barely different from the last two, I intend to gradually refine the appearance of the whole magazine in terms of both typography and the inclusion of more attractive graphics and photographs.

Palmtop must constantly improve in order to grow, and you can expect many positive changes over the coming months. Planned improvements include regular articles for the less experienced user, more in-depth how-to articles, more comprehensive news on the latest shareware offerings, a look at the best sources of Psion-related information and services around the world, plus other regular features. If you have your own ideas on how you wish *Palmtop* to evolve then please get in touch.

Moving away from the subject of 'Palmtop's progress', the magazine has naturally caused me to become more entrenched in the 'Psion scene', and I've been perpetually amazed by the level of enthusiasm for the Series 3/3a shown from everyone involved. I am now beginning to believe that a sizeable part of the wildfire spread of the S3/3a comes from the teachings of its disciples, i.e. from existing users 'spreading the word'. There will always be a degree of this phenomenon with any product, but the genuine keenness shown by the average Psion user when describing or demonstrating his/her machine is destined to make a real impression on the people in contact with such evangelists. How many times has someone shown a vague interest in *your* Psion, only to be treated to a full and impassioned lesson on 'all the reasons why they really *must* buy one'.

Perhaps some if this enthusiasm stems from the Series 3 being one of the first incarnations of a truly toteable machine to be sophisticated enough to make it genuinely and unequivocally useful for the average user. Perhaps the palmtop computer is only now beginning to earn itself some *real* credibility. For sure there's never been a better time to own a palmtop, and the situation will continue to improve as the technology of these little marvels pushes relentlessly forwards. These are exciting times.

Steve Clack - Editor

Palmtop News

The latest hot gossip on what's happening in the Psion world

1 & 2Mb 3a's in short supply

Reports of difficulties in obtaining the new 1 & 2 megabyte Series 3a's are only too common at the moment, with some suppliers claiming to be completely out of stock of the 2Mb unit until September and beyond. Psion are suffering from supply problems on the RAM memory chips used in both models: these being on a lead time of several months. The 1Mb model is the easiest to obtain, as it requires only one chip (as opposed to the 2Mb machine which uses two), but many prospective purchasers could be in for a frustratingly long wait.

SoundMASTER here at last

Psion's long-promised sound manipulation package has finally been released. See page 10 for a full review.

PsiWin released

The much talked about *PsiWin* file transfer and backup program to run under Microsoft Windows™ has recently been released. The software, reviewed in the last issue of *Palmtop*, is supplied as an integral part of the standard *3Link* RS232 (serial) link package, replacing the old MCLINK and RCOM utilities. The complete package is priced at £79.95, and the software alone is available as an upgrade at £39.95.

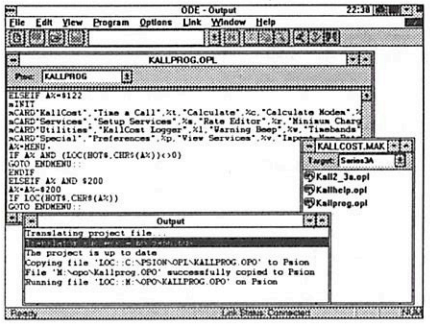
New OPL programming tools

ODE, the new ***O***PL ***D***evelopment ***E***nvironment to run under Microsoft Windows™, has just been released.

Designed to ease the job of software development for the Psion range, ODE contains numerous features to make life easier:

Programs are compiled into *projects* containing all procedures for a given program, together with its associated data files, macros, etc. Once the *project* is entered or imported into ODE it is scanned for errors, translated for the required machine, and then run directly from your Psion using the *3Link* to transfer the necessary files.

Apart from general programmers' tools, ODE helps the novice by incorporating *OPL Reference*, a superb Windows™ help file. By highlighting any OPL keyword in your code and pressing F1, a full syntax explanation and sample code appears on screen.



ODE is priced at £29.95 and requires Windows™ 3.1 or higher and a *3Link*.

Purple Tool Kit

Purple Software will shortly release an attractive utilities package based upon their popular *File Manager & Convert* software. The new suite, known as *'Tool Kit 1'* will provide new enhanced versions of both the comprehensive File Manager and useful units conversion software, together with two completely new utilities: *PicView* and *ScrnPrint*. *PicView* will allow any standard .BMP, .PCX and .GIF files to be viewed directly on the Series 3/3a, and *ScrnPrint* will allow any Series 3/3a screen image to be dumped to a printer. Drivers for most common printer types are included.

The complete package will cost £49.95 on SSD, or less if supplied on PC floppy disk. A full review of *Tool Kit 1* will appear in Issue 4 of *Palmtop*.

Nokia SMS Link

The *Nokia SMS Link* for the Series 3 and Workabout machines is now planned for release in 'late Summer' this year. More details will appear in issue 4 of *Palmtop*, but the link will basically allow editing, sending and receiving of SMS (Short Messaging Services) messages over GSM and PCN mobile telephone networks.

Autoroute for the 3a??

The ubiquitous route-finding software for the PC and Apple Macintosh, *Autoroute*, has been rumoured to be 'under construction' for the Series 3a for many months now. These rumours are now beginning to cement themselves into an actual release date of around September this year. The package will probably cover the UK only, and is likely be supplied on a 1Mb non-formattable ROM SSD—like the existing *Spelling Checker & Thesaurus*. Price is likely to be under £100, but no firm details are available at present.

Covertec cases

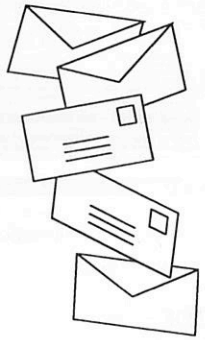
A French company, Covertec, is introducing a new range of rugged cases and belt/shoulder holsters for the Series 3/3a and Workabout machines. Full pricing and worldwide distribution details are not available at the moment, but it is hoped that the Covertec cases will be included in a comprehensive review of Series 3 carrying cases planned for the next issue of *Palmtop*.

Readers' Letters

This is an opportunity to voice your opinion on all those contentious Psion-related subjects and help to fund your *Palmtop* subscription at the same time.

EVERY published letter gets the author one free issue added to their subscription plus the dubious fame associated with being a *Palmtop* contributor.

As a special incentive to write, the best letter submitted for issue 4 will receive a FREE copy of Psion's new Soundmaster software reviewed elsewhere in this issue!



Dear Palmtop

I was interested to read Jill Dick's letter in Issue 2 referring to the key legends coming off her machine. I believe that the keyboards are sourced from a number of different suppliers and I suspect that this is where the variation in quality arises. On my S3a (now nearing two years old), there is no sign of deterioration of the lettering on the keys. This is despite the fact that I have fairly acidic fingers. I surmise therefore that the original 3a machines were built with a 'higher specification' keyboard.

What does trouble me with my machine (and I've seen the same comment from others) is the slight pitting of the screen which has gradually appeared. When it is viewed obliquely, a series of small straight lines can clearly be seen. These are caused by contact with the edges of the keys and are most noticeable at the bottom of the screen where the number/symbol keys press, though slight marking is also visible from the next two key rows as well.

If anyone is troubled by this marking, then it can be hidden fairly easily by using a trick taught to me many years ago by a fellow photographer, for dealing with slightly scratched negatives. Rub a finger down the angle between the nose and the cheek, to get a light coating of 'nose-grease' on the finger tip; then wipe the finger over the pitted area. The grease will fill in the pits and hide them from view. (That really is a serious suggestion, by the way.)

Finally, picking up Jill's last point about the 'Psion symbols', it can be seen that they are made from 'dismembered' letters, by looking at the symbol above the 'N'. Close inspection shows that the symbol is composed of two rectangles (the upright legs) and a parallelogram, which is the diagonal bar of the N.

Joe Griffin
Horsham, West Sussex

As part of an exclusive franchising deal, *Palmtop* will shortly be releasing special '3a nose-grease' in attractive gift packs. Never let it be said that we don't offer the best for our valued customers (?) - Ed

Dear Palmtop

I feel that I just have to comment on the review of *Sokaban* in issue 1. I have now successfully reached level 87 out of 86 (?!), and have spent many hours on the game. The level of complexity of each successive level rises consistently to about level 13, at which point there is a really sticky patch. The levels up to around number 20 thus give hours of brain-bending entertainment as one tries to fathom the mind that formulated the layout.

Beyond 20 or so the levels appear largely to ease in complexity, occasionally catching you out with a new and clever trap. Level 87 actually poses an 'impossible' puzzle, with access required to complete the level blocked by solid walls. This can be worked around (i.e. cheated) by going into the actual data file for the 87 levels, editing the wall position and then proceeding to complete the game. The wily author obviously predicted such devious trickery, and upon completing this manoeuvre *Sokaban* duly presents you with a dialog box saying 'Now go off and do something more useful instead'—or words to that effect.

Even having completed all levels of the game I am still hooked. I have now returned to level one and will probably keep going until I can complete every level in a single attempt.

Well done with the magazine Steve—my *Palmtop* is now as valuable to me as my 3a!

David Richards
Steventon, Oxfordshire

Dear Palmtop

'Palmtop News': to my way of thinking this is the most important part of your magazine, but who's trying to hold in with the Psion hierarchy with the statement that 'content of the magazine is excellent' when referring to Psion User? Whoever sold Psion management the idea of spending money on a project like this, only to fill it with a load of waffle deserves either a pay rise as a salesman or the sack if he's a Psion employee.

(excerpt from letter only)

John King
Cooktown, AUSTRALIA

Well John, I'd be the first to admit that *Psion User* is not the most *rivetting*

read, but surely you're being a bit harsh? One cannot deny the excellent quality of production (something for *Palmtop* to aspire to), and the material itself is competently written. The whole thing is largely another publicity tool for Psion, but I certainly enjoyed reading several of the articles, and it's entertaining to see the vast number of uses to which these amazing little computers are put.

Apart from the fact that *Psion User* is produced in the same font as *Palmtop* (you saw it here first), another obvious plus point is that it is completely free! *Psion User* may be only a rather small gift horse, but considering the relative scarcity of published information on the Series 3/3a machines it is a gift horse nonetheless.

Whereas it's not in my personal interest as editor of *Palmtop* to upset those at Psion I would certainly have had no hesitation in condemning *Psion User* if I really didn't like it—but that wasn't the case.

—What do other readers think of *Psion User*? Do you consider it a 'nice little freebie' or just another piece of junk mail? Please write and let us know - Ed.

Dear Palmtop

I was surprised to hear that the games *Fairway* and *Lander* were both written entirely using OPL. I once attempted to write a version of Asteroids for the Series 3, but only got as far as half a dozen big asteroids and a steerable spaceship before it all slowed down too much to go on. Some tips on incorporating pictures into a program from the authors (Steve Litchfield and Andrew Baldwin) would be very interesting. Another useful area would be information on what is available for program development. In my last job everyone in my department had Series 3's and I wrote the occasional piece of software when required. I wrote to Psion for information on development software and manuals, but I couldn't understand a word of it and never managed to get any further.

Keith England
New Malden, Surrey

Palmtop can easily come to the rescue on this one, Keith. Issue one contained a 'Programmers' Workshop' article on the very subject of graphics programming, and was written by the author of *Lander* in person—Andrew Baldwin. The same gentleman also discussed the various programming tools available to the budding programmer in issue 2 (which you will by now have received), and the depths of the voluminous SDK (Software Development Kit) are probed by Andrew in this issue.

If there is a particular aspect of programming (or anything else) that YOU would like to see covered in *Palmtop* then please get in touch - Ed.

Dear Palmtop

Once again the content, variety and quality of *Palmtop* has exceeded all the opposition, and I am pleased to note that subscriptions are rolling in at a good rate. I will continue to spread the word to all my Psion-owning friends.

Since last writing to you I have acquired a brand new *3Fax*—it's marvellous. Whilst my telephone bill may now increase a little I'm sure that my postage costs will reduce accordingly, and hopefully by even more!

The only negative point I would make about my new 'toy' is that Psion's idea of a 'nominal' cost for providing a scanned image of your signature (£19.95) differs somewhat from my own, especially after them having just obtained a good profit from the purchase of the *3Fax* itself.

In hindsight, by annoyance at the scanning cost is mostly due to my own rush to get the signature scanned. Had I considered things more cautiously then I would have remembered that I actually own an image conversion program for my Atari ST, which is quite capable of exporting Windows™ .BMP files. This, together with a 200dpi hand scanner and half an hour's work was all I needed to get both my own and my wife's signatures safely installed onto my Psion SSD. Oh well, what is money for if not to spend?

Chris Phelps
Brockworth, Gloucestershire

Shareware ??

Many of our readers may be unfamiliar with how to obtain the enormous amount of shareware and free software available for the Psion Series 3 and 3a machines.

Apart from downloading the software from electronic bulletin boards and online services such a CompuServe and CiX, perhaps the most exhaustive catalogue of software is held by Steve Litchfield's '3-Lib':

3-Lib offers either a collection of a couple of hundred of the very best shareware programs as a standard set on floppy disk, or selected files from the entire 3-Lib archives (currently around 1000 programs) on floppy disk or Flash SSD.

If you would like more information on 3-Lib then please contact Steve Litchfield directly at the following address (note that Steve has recently moved):

3-Lib
22 Grays Crescent
Woodley
Berkshire RG5 3EN
ENGLAND

Tel: +44 (0)1734 265081

E-mail:
slitchfield@cix.compulink.co.uk

or send a SAE for more details.

A Closer Look...

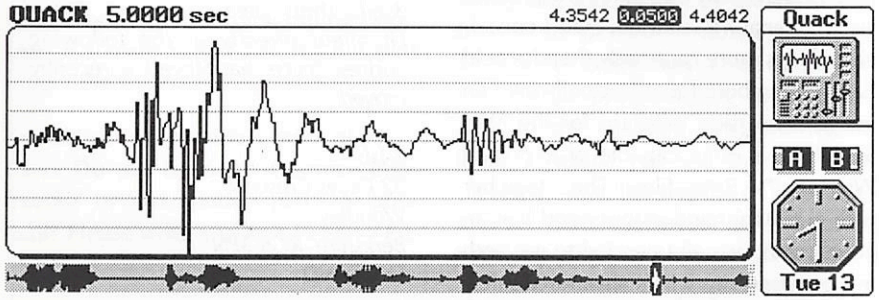
...at some of the newest and most interesting products available for your Series 3/3a

SoundMASTER

The colourful packaging for *SoundMASTER* proclaims that you can now 'Wake up to the sound of a bugle call or have baaing sheep remind you of your appointments. You can record your own voice, throw in some special effects, add some vibrato, mix in a drumbeat in the background and use the resulting sound in your Agenda. With *SoundMASTER*, you can create, mix and master your own sounds using a variety of special effects.' If that's what you want from your Series 3a then you certainly won't be disappointed. *SoundMASTER* is an amazing program that does all it promises. It is visually very attractive, and offers functionality beyond that of some professional sound editors.

I have used a variety of digital sound editing packages in my capacity as a commercial radio producer, and *SoundMASTER* compares very well. An accurate waveform of the recorded sound is drawn, and can be scrolled and magnified smoothly. Manipulation of the audio is pretty easy, and all of the options can be accessed either via the menus or by using hotkeys.

There is no doubt that if you want to manipulate sounds on your Psion then this is the package to use—the only question is 'why would you want to?' The Series 3a has no line level inputs or outputs and the sampling rate is only 8kHz, which rules out using it for any professional application. The sheer size of sound files prevents the 3a from being able to handle dictated memos, so at best it brings the user a novel way of customising early morning alarm calls to impress or annoy your friends. At worst, 3a sound is little more than a memory-intensive, battery-hungry gimmick.



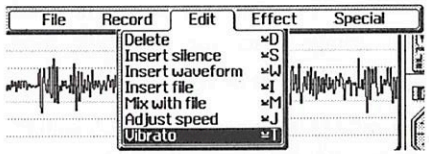
The entire waveform (along bottom), with a zoomed section in the main window

The 'tools' available from within *SoundMASTER* are as follows:

Adjust speed - The speed of the playback can be reduced to 10% of the original, or speeded up by as much as 1000%. The direction of the file can also be reversed.

Volume - Increase or decrease the volume, plus apply fading in/out at the start or end of the file.

Filter - Apply a filter to reduce background noise.



Adding the special effects...

Insert files - Two audio files can be joined or mixed together.

Insert Waveform - The option to insert 'pure' sound in the form of sine, block or saw waveforms, or white noise.

Vibrato - Best described as a 'wobble' added to the sound, with options to vary the magnitude of the effect and the number of vibrations per second.

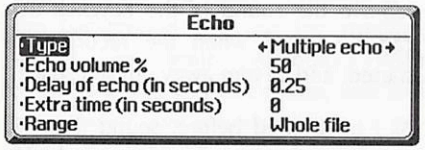
Echo - This gives the opportunity to add a single or multiple echo, vary the delay time, and increase the length of an audio file to incorporate a long fading echo.

Voxcoder - A very powerful effect which can add a metallic tone, church ambience (which sounds more like the recording was made inside a bathroom), or transform a human voice to sound like it's underwater.

If you want to create weird and wonderful alarm sounds for use in the Agenda or Time applications then you should find it very easy with *SoundMASTER*. Also, by using the delete, fade and filter commands, it's possible to remove the sound of the keyclick that can be heard when the recording is started, and to trim away unused space.

As I mentioned before, sound files will rapidly eat into your machine's valuable RAM, and in order for *SoundMASTER* to manipulate these data files you'll need a lot of free space. As an example, I recorded a five second voice sample which took up 41K. I then made a minor edit to the file, which created a workfile of another 41K. Then adding an echo created a temporary file, TEMP_WVE, which took up *another* 41K. Admittedly, this file deleted itself once the echo had been added, but when you bear in mind that the Psion literature says *SoundMASTER* needs 60K of free memory to run, and the program itself is 29K, you're looking at 212K of your precious memory eaten just to work on a five second voice clip!

Provided the program is given sufficient working memory it seems quite stable, although some of the effects take several seconds to calculate. This is not surprising, bearing in mind how much processing is being applied to the data. One 'bug' I found in the course of evaluating *SoundMASTER* . Attempting to add a sine wave of one second into a file caused my machine to lock every time I tried it. Any attempt to restart the program generated a 'File or device in use' error. The only escape route was to kill the application and start again. The original soundfile is unaffected, but I have yet to find a way of hearing *SoundMASTER*'s sine wave.

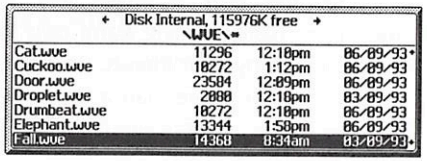


Adding an echo

One noticeable omission is that there doesn't appear to be any way of playing only a part of (rather than the whole) file. Once a selection has been highlighted for deletion or adjustment it would be useful to audition just that section. I found it odd that this option was not included.

SoundMaster comes complete with 39 pre-recorded sounds, ranging from a rather nauseating crying baby to a spine chilling cat, as well as a couple of *Star Trek* sound effects and ten samples of well-known classical pieces.

The package also includes two DOS programs, WAV2WVE and WVE2WAV, which will allow you to convert Psion WVE files to Windows™ WAV files and vice versa.



Sound effects on tap

The documentation supplied with the software is possibly a little basic. In booklet form, the ten page manual is the same size as a compact disc inlay, with only three pages describing the operation of the actual program. The remaining seven pages cover installation instructions and memory requirements.

In summary, *SoundMASTER* is an excellent piece of polished software, but I'm sorry to say is now destined for deletion from my machine. My Series 3a needs the storage space for something more important - data.

SoundMASTER is available on 3.5 inch PC floppy disk only. If you don't have access to the necessary *3Link* cable and computer (or a *RangerDisk*) then you'll just have to give this one a miss.

Pete Sipple

InfoBOX

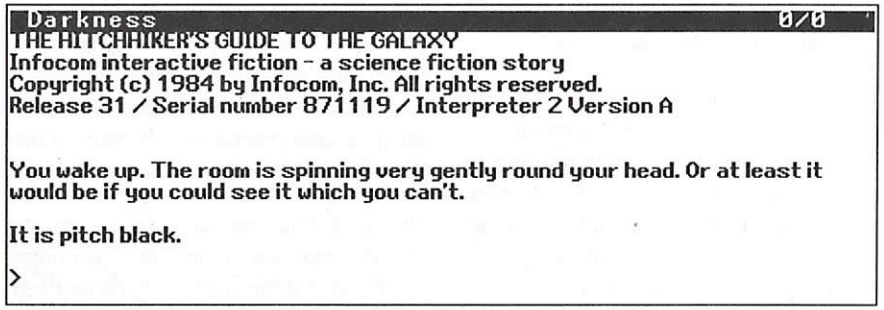
SoundMASTER is available from all Psion dealers at £24.95. It will not run on the Series 3 'Classic' machines.

The Lost Treasures of Infocom

The trouble with Series 3 and 3a games is that many of them lack the ability to hold the player's interest for more than what can often be a short number of hours. When considering that most commercial game packages sell for around double the price of a very good board game (remember those?) this can often represent rather poor value for money (even though they DO sometimes contain more than one game.)

Series 3/3a games likely to hold the player's interest for more than a few dozen hours can probably be counted on the fingers of one hand. Psion's own *Chess* game comes immediately to mind here, together with a few other implementations of classics such as *Patience* (Solitaire) and *Reversi* (Othello).

A less obvious member of this category is the *'Lost Treasures of Infocom'* package distributed by *Interdata Developments*. Presentation of this package is unconventional, at least to the Series 3/3a user, as it is actually an ordinary PC game with an add-on (the bit by *Interdata*) to make it run on a Series 3 or 3a. The 'game' comprises 22 text-based adventure games supplied on five 720K PC floppy disks. For those unfamiliar with text adventures, the player is placed in an imaginary world or situation, and is required to negotiate a number of complex scenarios in order to 'complete' the adventure. Completion of the games usually involves either escaping from some deadly peril, solving a mystery or successfully obtaining treasure or some other reward. Game play proceeds by typing in commands when presented with a textual description of each situation as the story unfolds (see screenshot below.)


Darkness 0/0
THE HITCHHIKER'S GUIDE TO THE GALAXY
Infocom interactive fiction - a science fiction story
Copyright (c) 1984 by Infocom, Inc. All rights reserved.
Release 31 / Serial number 871119 / Interpreter 2 Version A
You wake up. The room is spinning very gently round your head. Or at least it would be if you could see it which you can't.
It is pitch black.
>

The opening screen of the well-known 'Hitchhiker's Guide to The Galaxy'

The method of play takes only a matter of minutes to master, and the so-called 'input parser' will accept a sizeable vocabulary of phrases. Examples of recognisable commands might be: 'Walk to the North', 'West', 'NE', 'Down', 'Take the birdcage', 'Open the panel',

'Examine the shiny coin', 'Put the egg and the pencil in the cabinet', and so on. The font size and style can be adjusted to suit the reader, and games can be saved and restored at any point.

The contents really include two distinct sections: the first is a large and sturdy box containing the PC version of the games, comprising not only the program data disks but also two large books (totalling over 600 pages) containing masses of in-depth background information to help in solving the various adventures, and hundreds of hints for those occasions where you get really stuck. A couple of dozen assorted fold-out maps, plans and other notes complete the contents.

The second part of the package comprises a 20 page booklet containing everything you need to know in order to run the games on your Psion. Separate versions are included for both the original Series 3 and the 3a, although the software will not run in the limited memory of the 128K Series 3.

Installation involves transferring a single .APP program file from a floppy disk supplied with the booklet to your Psion, plus a separate data file for each of the 22 games.

The list of data files (games) installed on your machine then appear under an icon, just as document files within the word processor, database, etc. Bear in mind that although the data files are large in size (varying between 80K and 260K each) it is unnecessary to have more than one of the games loaded at any time. Be forewarned that the games are both elaborate and involved, and are not something you are likely to solve within a few hours of game play. Although the solution of each 'adventure' will of course vary from player to player, I would estimate that each is likely to take something in the order of 50-100 hours to complete from start to finish.

The attraction of this package will depend very much upon the individual tastes of the prospective gamer. Lovers of quick-fire shoot-em-ups may not find the text-only interface to be to their liking. For anyone with a penchant for fantasy and adventure however, the 'The Lost Treasures' could keep you engrossed for years! Although each game is played in essentially the same way and shares an identical user interface the themes of the games themselves vary enormously.

The 'Lost Treasures' also have a quality almost unknown in modern computer games, in that they can easily be enjoyed by more than one person at the same time. It is possible for a whole family to sit down with one nominated person reading each section from their Series 3, allowing the other members of the collective group to discuss and debate their next move. In this way, the game becomes of value as an entertaining diversion when either alone, when travelling on a long journey with others, or even as a party game.

If all of this appeals, and you have both the means to load the software from the PC floppy disks onto your Psion machine

(or SSD), and you have the free storage space in which to hold the rather large data files, then this combined package probably offers the most satisfying recreational software you could possibly buy for your palmtop.

Considering that the package really contains 22 complete and separate games then the value for money is quite excellent. How many other purchases would give so many hours of enjoyment for only a few pounds per game?

As a final bonus (for some at least), the games will of course run equally well on a standard PC compatible computer—even an old or slow one, as it doesn't require Windows™ in order to run. You can even transfer the log file for your current game in order to re-start on the PC where you left off on the Psion (or vice versa).

The following games are included in the 'Lost Treasures' package:

Adventure:	Infidel
Horror:	The Lurking Horror
Fantasy:	Enchanter Zork I Zork II Zork III Beyond Zork Zork Zero Sorcerer Spellbreaker
Mystery:	Deadline Suspect Witness Ballyhoo Moonmist
Sci-Fi:	The Hitchhiker's Guide to The Galaxy Planetfall Suspended Stationfall Starcross

The Psion program disk also contains two bonus classic games: *Adventure* and *Curses*.

The packaging describes this compendium of games as 'A fortune in Interactive Mystery, Fantasy and Science Fiction Adventures!' For many people this description is really quite true.

Steve Clack

InfoBOX

'The Lost Treasures of Infocom' is available directly from the following address:

Interdata Developments
6 Okeover Road
Salford M7 4JX

Tel: +44 (0)161 7922871
Fax: +44 (0)161 7922114

Price is £45.45 including postage and packing within the UK.

Serious Programming on the Psion Series 3a

A nice book for the complete beginner, describing how to program in OPL on the Psion series 3a. Please note the 'a' here, as there is also a separate Kuma book devoted to programming on the Series 3 'Classic'.

The book contains 12 chapters ranging from the fundamentals of 'computers and their languages' to 'manipulating the memory'. There are also two appendices containing the solutions to all of the 'tests' contained within the book, plus several program listings. A disk containing all of the programs in the book is also available, but this is *not* included and must be ordered separately.

The book takes the user step by step, and assumes the reader to have acquired some knowledge at each stage before proceeding to the next chapter. At the beginning of each chapter you are presented with the 'training objectives' and at the end of each chapter there is a test to confirm that you have mastered the current subject. The whole concept is actually quite straightforward, though rather school-like.

The content of the book is quite complete within its scope, but it is most certainly aimed at a person with little knowledge of programming, so the more advanced programmer will find little of interest within its pages.

In the book's favour, I really liked the way the author explains each term in clear detail, and despite containing quite a lot of theoretical material it also has numerous well described examples. On the downside, in real terms the book contains little that is not covered in the standard 3a Programming Manual, it is just presented a little differently (and perhaps in a more readable fashion). Also, I didn't like the typographic output: the text is full of errors and is poorly printed, which sadly appears to be a common feature of Kuma's Psion related books.

As I said, if you read the Programming Manual thoroughly then you will learn practically as much as if you buy this book. On the other hand, if you're interested in the more theoretical terms and in the principles of structured programming then you will find some useful passages in this book.

All in all, I don't regret buying "Serious Programming...", I just wish they had changed the title to remove the word 'Serious'. Given the level of the information contained within it I would say that this title gives the reader a slightly misleading view of its targeted appeal.

I would recommend this book particularly to someone who has NEVER programmed before in any language, but if you are already familiar with BASIC or some other language then you may be well advised just to read the Psion Programming Manual instead.

Chapters

Here are the chapter titles to give you a better idea of the content:

Chapter 1	Computers and their languages
Chapter 2	Program design
Chapter 3	Variables
Chapter 4	Using the series 3a display
Chapter 5	Decisions ... decisions
Chapter 6	Looping the loop
Chapter 7	Arrays
Chapter 8	Procedures
Chapter 9	Functions
Chapter 10	File handling
Chapter 11	Graphics [the biggest chapter of the book]
Chapter 12	Manipulating the memory
Appendix A	Answers to post tests
Appendix B	Listings
Index	

Daniel Pfund

Onex, SWITZERLAND

Databases!

In the 'Beyond DATA' article in the last issue of *Palmtop* I failed to mention which versions of the software were being reviewed. These were: JBData 1.2, DataView 1.01F and DataDeLuxe 2.50.

JBData has since been upgraded to version 1.3, which now supports direct international dialling.

The review also stated that JBData does not print in list view—this statement was incorrect. My apologies to John Boyce for my error. Sorry John!

Classifieds?

No-one appears to have anything for sale this month, but please don't forget that Palmtop will happily publish classified advertisements free of charge, subject to available space.

InfoBOX

"Serious Programming on the Psion Series 3a" is written by Bill Aitken, and is available from selected dealers and bookshops, or directly from Kuma on +44 (0)1734 844335, priced £16.95.

(381 pages. ISBN: 0-7457-0282-1)

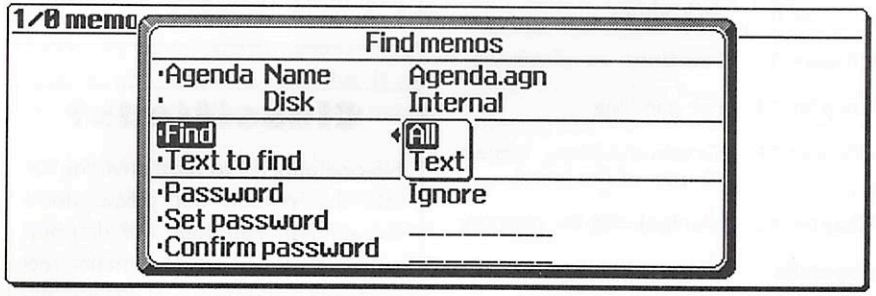
MemoFind

Attaching memos to your 3a Agenda entries is a useful way to add long notes to the rather short description allowed in the Agenda entry itself. Entering information in this way is simple and straightforward, but do you ever wish there was an easy way to find text *within* those memos? If you know that you've attached a memo to an entry, but can't remember which one, then Agenda has no way of locating this for you—you can't even get a listing of all the memo entries from which to start looking.

③ It will allow you to enter any text string, and will locate all memo entries that contain the selected text.

MemoFind will also handle any entries you may have encrypted with passwords, prompting you to enter them as necessary in order to access the text. *MemoFind* requires you to close down each Agenda file before you can search it, but this is a small price to pay for the use of such a valuable program.

The single .APP file takes less than 12K of storage space, and it even has on-line help! Indispensable.

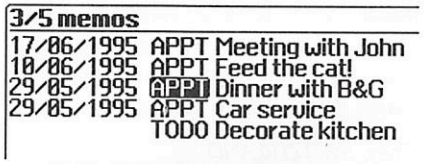


Getting ready to search for memos

MemoFind solves all these problems at a stroke. This simple utility has three main features:

① It will search through any Agenda file, giving a list of every entry it finds (see screenshot).

② By pressing *'Enter'* with the cursor on any item in the list, *MemoFind* will take you directly into the corresponding memo so you can read it.


3/5 memos
17/06/1995 APPT Meeting with John
10/06/1995 APPT Feed the cat!
29/05/1995 APPT Dinner with B&G
29/05/1995 APPT Car service
TODO Decorate kitchen

Listing selected memo entries

InfoBOX

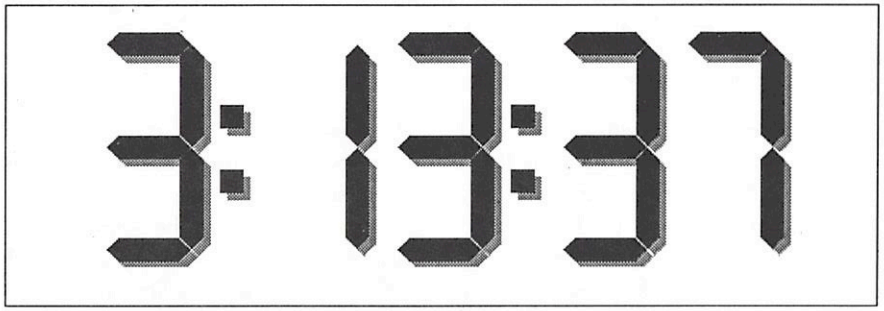
MemoFind is available as freeware from the usual sources as MEMFIN.ZIP.

Clock

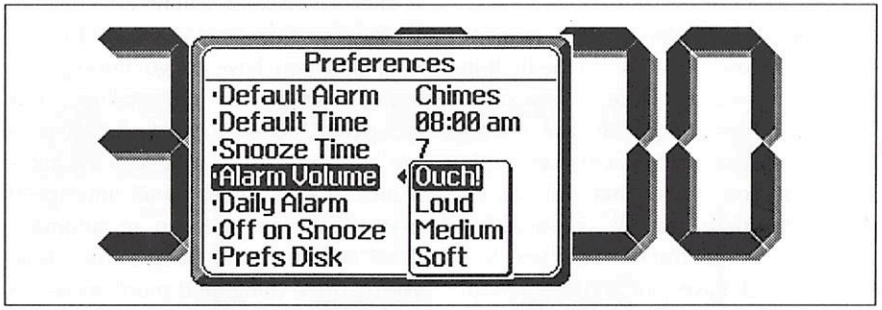
Here's another simple but useful utility. Turn your 3a into an attractive (but expensive) desk clock with 'Clock 1.1', by Dan Comiskey. When run, it simply displays a giant on-screen digital clock showing hours, minutes and seconds.

Clock has no exciting hidden features, and although you can set alarms from within it, this can be done equally well from the Psion's built-in TIME software.

The primary use for this software is for someone who keeps their 3a on a desk and plugged into a mains adaptor with the auto switch off disabled. 'Clock' can then be assigned to the 'Control-Time' softkey, kept running continuously, and used to display a running clock when the 3a is not being used for other things. Probably entirely useless for 90% of users, but a delightful desk accessory for the other 10%. In any case it's free, so you can easily try it out to find out where you fit into this equation.



Guess what? An on-screen clock!



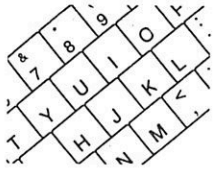
Configurable and snoozeable alarms

InfoBOX

Clock is available as freeware from the usual sources as CLOCK.ZIP.

Macros on the Series 3a

How would you like to make your Series 3a more efficient, more powerful, and yet easier to use? Sounds too good to be true? Not if you use macros. *Rick Andrews* investigates...



Macro recording provides a way of copying key presses and replaying them automatically when a particular key sequence or 'hotkey' is used. All macro programs work the same way by 'fooling' the computer into thinking a series of key strokes have been made when a hotkey combination is pressed.

How are they helpful? Well, macros enable you to add features to the built-in applications. For example, if you often type your own name into documents then you can set up a macro that simply 'types out' your name whenever you hit the appropriate hotkey combination (perhaps *Shift-Control-n*). Or if you feel Psion should have put a 'date stamp' feature in the word processor application that writes the current date and time, you can add this yourself by installing a macro, so that pressing the hotkey will 'type' the date stamp. And not only will this macro run in *Word,* but now *Data, Sheet* and all the other applications will now have a useful Date stamp feature too.

Macros also enable repetitive tasks to be automated, and you can gain control of non-programmable settings. For example, you can use a macro to turn the system sound off before running a noisy game, and then have the sound switch back on again afterwards. The scope and usefulness of macros is limited only by your own imagination.

If, after a hard reset, you find the relief of seeing your data intact is scuttled by realising that you have to go through the tedious process of reinstalling your groups and icons, you will find it useful to run an 'install' macro that does this automatically. An example of an 'intelligent' macro is the ability to do an automatic 'find' and 'bring' of people's details in Word. These things and much more are possible if you take a little time to get to grips with one of the two excellent macro programs available for the 3a.

What macro software is available?

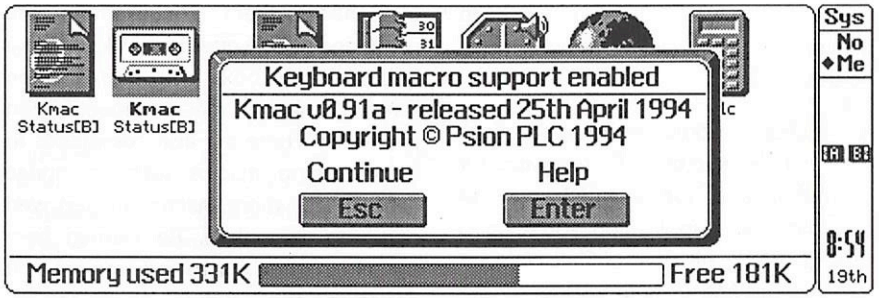
Macro packages are available for most computers (Windows™ has one called *Recorder*, the Apple Macintosh has *AppleScript* and there was also the popular *FnKey* for the Psion Organiser II), but it wasn't until last year that the Series 3a was so endowed when David Wood produced the technological know-how to trick the OS (Operating System) into thinking the keys had been pressed. This allowed programmers to write applications that could control others, though technically only those written to use the XWIM software development library.

An unfortunate limitation is that macro software that uses this method won't work in OPL programs or applications that use HWIF (another development library). For a while this meant only the built-in applications could support macros, but there are now some third-party programs using XWIM (for example the shareware viewer/converter *FirePic*). If you're not sure what type of application you have, or this is all gobbledegook to you, there is a quick and easy way to find out if macros are supported, by using *KMAC*—detailed overleaf.

There are really only two macro applications available for the S3a (sadly there are none that work on the Series 3 classic) and they both use David Wood's work as their foundation. In fact, David wrote the first application, *KMAC*, and released it with the source code last year. The second application, *MacSys* comes from Tom Dolbilin, an OPL developer in the USA.

Focus on KMAC

Looking first at *KMAC* (the name stands for **K**eyboard **Mac**ro), you may be wondering why the screen shot below doesn't show a picture of the application screen. Well, it's because *KMAC* is probably unique among Psion applications in that it doesn't display its own screen when it runs, weird huh? But it does have a very good reason for this type of design, as it makes the package as unobtrusive as possible. It just lurks around, allowing you to work in other applications, waiting to hear its wake-up call. Of course, as it has no screen, there is no point in assigning an application button to the *KMAC* icon—you can simply keep it running constantly in the background, waiting for the necessary keystrokes to



The closest you can get to a screen shot of KMAC

instantly execute the required macros at any time you choose.

Every time *KMAC* is started, you can choose to view a dialog box giving a summary of the hotkeys it uses; they are all based around the *Ctrl-Shift* modifiers which aren't in normal everyday use, so *KMAC* shouldn't pop up unexpectedly. In case you forget the hotkey summary, it can be brought up at any time with *Ctrl-Shift-Help* as an aide memoire. To record a macro, hit *Ctrl-Shift-Space* and enter the name of the macro. From now on, as well as producing their usual outcome, all keystrokes are captured until *Ctrl-Shift-Space* is hit again to end the macro. A message appears confirming the macro name and showing the number of key presses stored. To replay the macro at any time, just use *Ctrl-Shift-Enter*. This may all sound a little complicated, but it's very straightforward once you have been through the process a few times, so don't be deterred!

As mentioned above, some applications can't handle macros (OPL programs for example), and for a quick way of checking if the application you're in is 'macro ready', hit *Control-Shift-Help* for the pop-up *KMAC* help dialog—if the software can't support macros then a warning alert appears instead of the usual dialog box. Simple.

After a macro has been recorded, you can change the hotkey using *Ctrl-Shift-Menu*. This allows up to 26 macros assigned to the hotkeys *Ctrl-Shift-A* through to *Ctrl-Shift-Z*. Unfortunately, having to use the *Ctrl-Shift* base means that keys like 'Help' and 'Tab' cannot have macros assigned to them. When you exit *KMAC* (by hitting 'Delete' on the System screen) the macros and their hotkeys are saved to a .KMA file which appears under the *KMAC* icon on the system screen. You can use different sets of macros by choosing a specific .KMA file when starting *KMAC*. And if you get into a pickle with a macro playing back in the wrong place, it can be interrupted with a quick hit of *Shift-Ctrl-Esc*.

You could decide to stop there with *KMAC* and just use the basic macro features, but you'd be missing out a lot of advanced capabilities, as *KMAC* comes with a command language enabling complete control over your macros. By using the editor KMACED.ALS you can add definitions to basic macros in order to enhance them. For example, the command *'Qtitle,question'* will pop up a query dialog box, with *KMAC* then running a second macro depending on the result. There are also commands to help develop macros such as 'nudge debugging', where macros are replayed one step at a time. Be warned here though, as some macro code can get a bit daunting—the author gives us an example of *'S@m^T^0@4^U'* as one abbreviated macro!

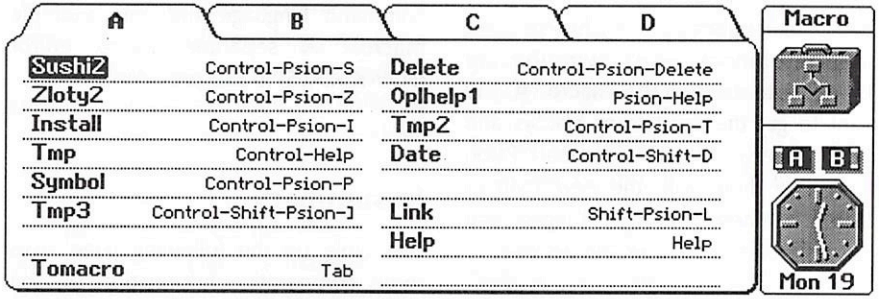
The documentation provided with *KMAC* is very detailed, with over 50Kb of text (too big to fit into Word!) describing the main *KMAC* application, and although some of it is a bit technical it really does explain the full capabilities of *KMAC* in detail. Also the document explains how to write OPL programs that can use the *KMAC* facilities themselves. Very useful for the more advanced user.

The 'have-to-have' files are KMAC.APP and LPC.DYL, the *Local Process Control* library which allows one application to control another. Also provided is a .DBF database file of the macro 'Command Language' definitions as a handy reference. A set of example macros are also given, one of which automatically starts the Agenda in Week view.

Although David Wood works at Psion and *KMAC* is under Psion Copyright, it is *not* an official Psion product, so isn't covered by Technical Support, etc. However, David does say that he will try to answer any *KMAC* questions posted in the Psion conference on CiX.

Psion application. When run, it displays a screenful of 'slots' for macro names and their hotkeys arranged as four tabbed folders holding 16 macros apiece. Switching between them is accomplished by using 'Tab' or the arrow keys, or by hitting a letter key which moves to the first macro beginning with that letter.

Recording is not as ad-hoc as *KMAC*, as you have to be in the *MacSys* application in order to begin recording. But hitting *Psion-R* shows the on-screen instructions to switch to the application you want to record in. You also get a friendly 'waiting to record' message flashing in the corner to remind you that *MacSys* is awaiting input. Pressing *Psion-Menu* starts recording keystrokes with a 'Recording On' message as confirmation, with *Psion-Menu* again stopping the recording. You are then jumped back to *MacSys* where



The Macro System application

Focus on MacSys

Macro System 2.0 (*'MacSys'*), written by Tom Dolbilin in the USA, provides much of the same functionality as *KMAC*, but is packaged much more like a 'normal' you have to edit and translate the macro before inserting it into its 'slot'. Here you choose a hotkey which can be anything from *'Help'* to *Control-Shift-Psion-Z*. The editable source code is stored in a .MCR file under a /MACRO/ subdirectory, with

the translated output stored in a .MCO file.

Perhaps the biggest contrast between this and *KMAC* is that *MacSys* uses OPL (the built-in Psion programming language) as the basis for its macro language. What difference does this make? Well, OPL is a simple language to learn, and having the ability to control macros in OPL makes a powerful combination of the two resources.

Developing a *MacSys* macro is very easy: start by recording the basic keystrokes, then edit the .MCR file, adding *MacSys* functions or your own routines as needed. (*MacSys* comes with an 'alias' of the OPL editor application in which to edit macros). For example, look at this section of a macro to merge two spreadsheet reports into one:

As you can see, actions like moving the spreadsheet cursor can be achieved using simple routines like *'JumpTo:'* or *'UseFile:'* to control the macro. If you want to get the most from *MacSys* and didn't receive an OPL manual (Psion don't ship them with the new 1Mb or 2Mb machines) I strongly suggest that you send off the coupon and get one.

As there is practically no size limit to *MacSys* macros, debugging could have been a problem, except that the author has supplied a *'Log:'* keyword which records text messages from the macro into a separate log file. Any errors picked up by *MacSys* are written to this log file, and there is an option in the *MacSys* application to view this file, as well as the means to switch this diagnostic logging on and off. When developing macros it is sometimes useful to know the ASCII code of a particular key press: *MacSys* has a useful command which displays the keycode value of any key sequence you enter.

The on-line help comprises several screens ranging from the real basics to the installation and running of your macros. There are about five pages of documentation covering the *MacSys* application plus a data file of the command language and nine example macros. A separate macro editor (EDIMCR.ALS) is also provided.

In summary

The table on the following page gives some comparative information on the two packages. Both *KMAC* and *MACSYS* are available from *3-Lib*, on CiX and CompuServe, or the Internet FTP archive at *src.doc.ic.ac.uk/packages/psion*, as usual.

```
UseFile:("Sushi2.spr")
ToFront:
SendKey:(Esc%,0,1)
JumpTo:("A1")
SendKey:(psion%+end%,shift%,1) rem Psion-Shift-End
UseFile:("Zloty2.spr")
```


Application	KMAC v0.91a	MacSys v2.0
ZIP file name	kmac091.zip	macsys.zip
Size of ZIP (bytes)	40,591	40,749
Date released	26 April 94	21 August 94
System memory used	20K	27K
Application file size	15K	36K
Maximum simultaneous macros	26	64
Command language keywords	42	56
Maximum single macro size	127	Unlimited

Both programs are extremely well written, with no obvious bugs. It's just a pity they won't work within ordinary OPL programs. If you just want the ability to use a few macros now and again without having to use OPL, then *KMAC* is probably more useful for you, and it's smaller and quicker to use. On the other hand, if you want the ability to maintain and organise a complete suite of OPL-based macros (effectively a scripting-like macro language) then *MacSys* is the better system. *MacSys* has more third-party macros written for it, like *PASON*, which controls the use of the Psion system password. If you're not sure, why not try both and then choose the one you feel most comfortable with?

Finally, the cost? Amazingly, both these little beauties are *freeware*—which is fantastic, as it means there is no reason not to give macros a try!

As Rick says, both packages come with good documentation, so this should be enough to get most people started.

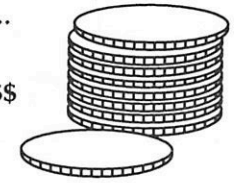
To help out further, there will be more coverage of this useful technique in future issues of *Palmtop*. Readers are invited to send in their favourite and most useful macros (either *KMAC* or *MacSys*) for publication in the magazine. If there is enough interest, then we can even incorporate a regular *Macro-Corner* in each issue. Let me know what you think...

- Ed.

Money, Money, Money!

Steven Shone expounds the virtues of having your Psion palmtop look after your personal finances...

$$



In the days of the old Psion Organiser II, I was both a user and a programmer. The relative simplicity of that little box of tricks was such that I could program it with relative ease. I wrote a vertical application or two even for the Series 3. The graphics were clunky, and I could deal with them. The 3a, in programming terms, is just too much for me. I can't cope with the windows and graphics, and though I could still write the simple programs of old, they would now look like graffiti on the walls of an art gallery.

So (with minor exceptions) I now leave programming to the experts and spend alarming amounts of my hard-earned brass on the burgeoning range of commercial and shareware products.

My 2Mb 3a metaphorically bulges with software for all seasons. My working and social lives revolve around 'The Psion', and my 40+ hours of battery life per pair of batteries rarely lasts more than 10 days. I love it dearly, and if it malfunctioned would miss it almost as much as I would a broken arm or leg.

But of more than 60 applications on the machine, which has made the most difference to my life? Which is the one I could not live without? The possibly surprising answer is *Psion Money*. Until two years ago I was poorly organised financially: I didn't reconcile my bank statements, I reconciled myself to them. My 'net worth' was a subjective psychological measure, rather than a financial one. My bank statements might have been prepared by Alfred Hitchcock, bringing as they did suspense, shock and horror.

Dedicated use of this bank account management program has transformed me. My 3a now stores details of every payment and receipt for at least the last six months. I issue monthly profit and loss statements and balance sheets to myself. I track my wife's impressive expenditures against her less impressive budgets. I print out detailed quarterly accounts, and can retrieve archived data in moments.

I cannot tell you how good it feels to write to my bank politely pointing out its errors—after years of receiving letters from it, politely pointing out mine. Or replying by return to questions from my accountants about tax-deductible expenses. Or invoicing my firm in minute detail for all my travel and other expenses.

The software paid for itself in its first month. It must have paid for the 3a and two 4Mb SSDs in its first six months! I have identified many of the ways in which my salary was leaking away, and have plugged them; best of all, I am in control. No bank or credit card statement ever surprises me (unless it is *wrong*—as a surprising proportion are). I have recovered much more than the cost of the software in corrected errors, which in my happy-go-lucky days I would never have detected.

Yet the time invested to achieve all this is surprisingly small. An hour to set up the accounts (two years ago). A few seconds every time I spend something. A few minutes every time I receive a statement. An hour or so every year to set up budgets for the following year. I could certainly achieve the same results with paper records, but I would never find the time.

The point is that you can't solve a problem unless you can define it. Constant measurement of my financial status has put my problems in proportion and made them soluble. I operate within my means, and have steadily increased my net worth ever since I first worked out what it was! Yet I have not sacrificed a single pleasure. On the contrary, I have been able to afford pleasures I previously thought were beyond my reach. All the difference has been made by eliminating waste, and building regular savings into my monthly spending pattern.

Of course people can (and do) achieve all this with PC-based software such as *Quicken*—in fact, *Quicken* can do much more than *Money*. In my view however, no additional features on a PC program can offset the Psion's primary advantage—that it is with me at all times. It is there when I spend the money, so it is always completely up to date. I enter my data in spare moments on planes and in waiting rooms, rather than having to dedicate special time to the task. No shoe-boxes full of tiny slips of paper ever deter me from keeping on top of my finances.

On the 3a, *Money* now has serious rivals. From what I have read, *Banker* from Pelican Software is much better at exchanging files with *Quicken*, and may have other features too. Its author is on CompuServe, and regularly implements new features requested by users. *Money* is just the way it is, and the author is safely inaccessible. I have to live with its idiosyncrasies. For example:

- It consumes too much RAM to be left running all the time (at least if I want to run *3Fax* or my time recording software or *Fairway*), and it loses some of my layout preferences every time I exit.
- It shows my net worth in the bottom right hand corner of the main screen,

and I don't really care to have it on constant display around other people.

- I work in several currencies, and would prefer to have line items in my Polish Zloty or my US Dollar accounts in local currency, while leaving the balance sheet and profit & loss accounts in Sterling.

I don't normally subscribe to the 'if it ain't broke don't fix it' philosophy. If I did, I would happily be lugging a bulging *Filofax* everywhere. On this occasion, however there is too much at stake for me to risk a change! Until the Series 4 at least, *Money* will be organising my financial life. New users of such software, however, should check out the opposition.

As a partner in a law firm, I receive a lot of financial data about our business. Using *Money*, I can now honestly say that my personal accounts are maintained to the same standard. All this with a staff of one (unpaid), and a machine that fits in my pocket.

Steven D. Shone
Warsaw, Poland

COMPETITION

Here's a chance to win yourself a copy of Psion's *NEW* audio manipulation and sound effects software, *SoundMaster*, reviewed on page 10 of this issue.

All you need to do is send us a list of the 'ten most indispensable pieces of shareware and free software' for the Series 3/3a.

The list can include absolutely any software you like—simply make sure that each item is likely to appeal to a wide range of users.

The best list will be published in the next issue of *Palmtop*, and if successful this may become a regular feature in the magazine.

Programmers' Workshop

by Andrew Baldwin

Welcome to my third programming workshop. I've received a number of letters regarding my introduction to Object Oriented Programming in the last issue, mostly asking where to find all that information. Well that's something I'll look at later in this article, but first let's continue with what we were looking at last time: events and their importance when creating programs that remain responsive to the user at all times.

Apply yourself

There are two types of program you can create when you write in OPL. The first and simplest is to create one or more procedures using the Series 3/3a's built-in program editor and then to choose the Translate menu option. This writes out a file to the /OPO/ directory with a file name ending in 'OPO'. Such a program can be executed either from the Run option in the program editor or by selecting its name from under the RunOpl icon on the system screen. When writing such a program you don't need to handle any events other than directly relevant ones such as keypresses, and you don't need to write it with any consideration of being 'nice' to the rest of the computer, since the program can be 'killed' by the operating system at any time by highlighting its name on the system screen and pressing delete. Though relatively easy to create, such programs cannot be installed with their own icons on the system screen. In order to do that you must create what is known as an Application.

The only difference between an application and a 'normal' program is a short header in the source (OPL) file beginning with APP and ending with ENDA. When you translate such programs they are instead saved in the /APP/ directory with an 'OPA' extension. Such files can be installed on the system screen just like most commercial software and can include an icon image in their main file.

With writing an application comes a new level of responsibility. Suddenly there are many things your program must respond to in order to be called 'system friendly'. However, remembering my comments on event-based design from the last issue of Palmtop, all we really need to do now is to handle new types of events that are sent to our program: the most basic of which is the exit message. This is 'sent' to your program by the system screen and simply 'tells' the program to shut down. It is therefore possible for a program to safely save your data before terminating,

rather than just terminating abruptly. Furthermore, if your program needs to manipulate a particular file or file type in some way, then it is possible to receive Open or Create messages telling you to change files or to create a new file where necessary.

The different application types are all documented in the programming manual along with example code implementing simple applications. You should use these as a basis for your applications along with an awareness of the importance of event loops.

System secrets

As I mentioned above, my discussion of the use of 'objects' in the last issue of Palmtop generated a lot of feedback. The main question asked was 'Where can people find all the information, such as those special object and method numbers?' Well, as with most things on the Psion machines, the 'bible' in these matters is the Psion Software Development Kit. I mentioned this in passing last time with regard to alternative methods of programming the Series 3/3a. In its Standard and Professional versions this provides a complete PC-based 'C' development kit, but in both these and the cheaper Documentation only version (although it still costs around £90) you receive 4 thick (and I mean thick!) volumes of technical information covering all aspects of the Psion SIBO architecture, which includes the Series 3/3a, the new Psion Workabout, and the older MC and HC machines.

Each volume is split into a number of reference manuals, with some of these being specific to a particular type of machine, whilst others cover generic topics applicable to the whole range of SIBO machines. So, exactly which of these are relevant to lowly OPL programmers? Let me go through them in a little more detail:

Volume 1

This consists of 6 manuals:

General Programming Manual

This is of most interest to C programmers, although it does look at important design principles such as error handling, many of which are relevant to OPL.

The SIBO Debugger

The debugger is an extremely useful tool if you program in C or machine code, and you have access to a PC. It allows you to step through code line by line, examining all aspects of a program. This manual explains its usage, but unfortunately the debugger is of no use to OPL programmers.

HC Programming Guide

This is a guide to programming the Psion HC machine. Not useful for 3a programmers.

Series 3/3a Programming Guide

This is much more useful to OPL people. It looks in-depth at the specifics of writing programs for the 3/3a. This includes subjects such as icons in applications, aliasing, important reserved statics (fixed areas of memory in a program that contain useful information), communication between programs and the system screen, multilingual applications, sound, and using the SPY program to keep a watch on all programs being run. All in all, a very useful manual.

Programming in HWIF

This covers the C HWIF library. Not relevant for OPL programmers.

Additional System Information

A mixed bag. It covers topics such as the main file formats (DBF, Agenda, Word Processor), resource files (these contain all the language elements of a program, allowing for multilingual programs and compression of the textual information. This is potentially useful for OPL users, but is somewhat difficult to implement). This manual also contains information on printer models and device drivers.

Volume 2

Also 6 manuals:

PLIB reference

PLIB is the fundamental C library, so on the face of it this manual doesn't appear to be useful for OPL programmers. However, lurking within it is a wealth of information regarding many important issues in EPOC, including memory allocation, asynchronous I/O, and Interprocess messaging. Furthermore, since many PLIB functions are just shells over system calls built into the ROM much of the information is useful. These system calls get their own manual further on.

Window Server Reference

If you want to understand how graphics really work on the Series 3 then this is the manual. Many aspects of this are not apparent when using OPL, but they are all available via system calls. This manual tells you how to use these calls (if you can translate the C speak to OPL speak—not always easy).

I/O Devices Reference

This explains how to use all the input/output devices available to you with the OPL IOOPEN, IOCLOSE, commands, etc. It covers things such as the Serial and Parallel ports, Sound and Timer devices, plus others. Very useful.

ISAM Reference

ISAM is a 'DYL' (discussed in the last issue) that allows rapid access to large database files. This manual explains its usage, and you can even use it from OPL.

EPOC O/S System Services

This is the jewel in the crown for OPL programmers. It documents the majority of the built-in system calls in all EPOC machines. Although not all are useful in OPL, those that are include all the little 'trick' functions such as those for launching processes or changing system flags. This section is even more useful if you are programming in something like Small C, since it provides you with a large set of efficient functions. If you want to use these functions in OPL then you will need to search the disks that come with

the SDK for the relevant 'include' files that tell you the 'magic' numbers, but this is not a difficult task. In the next issue I intend to go into more depth on the use of system calls from OPL.

Hardware Reference

Only relevant if you are building expansion devices—not for the faint hearted or inexperienced!

Volume 3

Volume 3 consists of only two manuals. It is the main introduction to object oriented programming—the route to the best applications:

Object Oriented Programming Guide

If you intend using Objects in OPL then this is worth reading in order to familiarise yourself with the fundamentals. However, much of the in-depth information (especially regarding the HWIM library) is mostly of use when programming in C. By using special OPL code written by someone at Psion then much more of the HWIM code can in fact be used from OPL, however it is pretty complicated stuff.

OLIB Reference

This is slightly more useful as it contains information on the built-in OLIB DYL. This was in fact what I used to create last issue's VARRAY example. There are other objects here that are usable from OPL, but unfortunately many others require what is known as subclassing in order to be useful, something not really possible in OPL.

Volume 4

I don't own a copy of this one, so I can't discuss it in depth. Previous versions of the SDK up to version 2 included only the first 3 volumes, but the most recent version (2.1) comes with this extra volume, mostly covering more of the Object oriented libraries.

Summary

So, is the SDK documentation useful to OPL programmers? Well, on the whole yes—or at least it contains a lot of useful information. However, I don't think it is a worthwhile purchase unless you are going to be producing serious applications (for money!) The good news is that there are alternative ways of finding much of the same information. Firstly, the most useful manual from the SDK (the EPOC O/S System Services) is available free in electronic form on certain electronic bulletin boards such as CiX. Secondly, much of the SDK information has been collated by Clive Feather into a set known as the Psionics files. These can be downloaded from the Internet (or try 3-Lib) and contain useful information on system calls and other subjects.

Acronyms 'R' Us

Just in case you're wondering what all these acronyms mean, let me shed some light. Psion refer to the Series 3 and other machines as being based on the SIBO architecture: where SIBO is short for either 'Single Board Organiser' or 'Sixteen Bit Organiser' (take your pick!) The Psion operating system that runs on the SIBO architecture is known as EPOC, however, nobody seems to know what (if anything) EPOC is short for—the most popular suggestion from Psion employees being 'Electronic Piece of Cheese'!

Short and sweet

No program listings for you to type in this time. If you have suggestions for things you would like to see in future articles then send them to Palmtop or e-mail them to me on either andrew@zarquon.demon.co.uk, or baldwina@cix.compulink.co.uk. Next issue I hope to take an in-depth look at 'ODE', the new Windows™ PC-based OPL Development Environment software from Psion.

WANTED

RangerDisk 3 in good working order

- contact Paul Lippi
11 Ali Ibn Abi Taleb Street
P O Box 19686
Jerusalem 91196
ISRAEL
or fax c/o Meriden Hotel:
+972 2 285214
or tel: +972 2 283271 (not Saturdays)

PALMTOP

Is there anything you would like to see within the pages of *Palmtop* that isn't currently included?

Do you have a great idea for a regular feature or section you would like to see in the magazine?

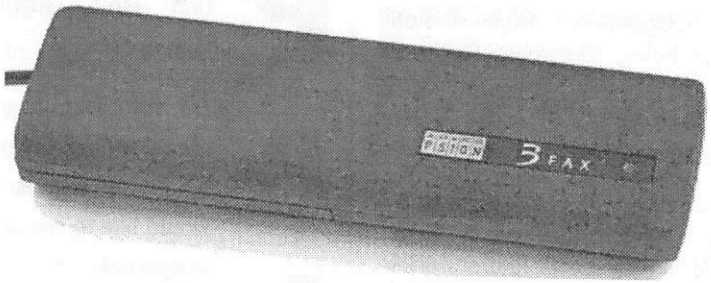
Can you think of any changes that could be made to *Palmtop* to improve or widen its appeal?

If you have any good ideas such as these then please don't keep them to yourselves! Any suggestion that is subsequently turned into a regularly published feature will earn you a free issue, and a mention in the first issue where the idea is used.

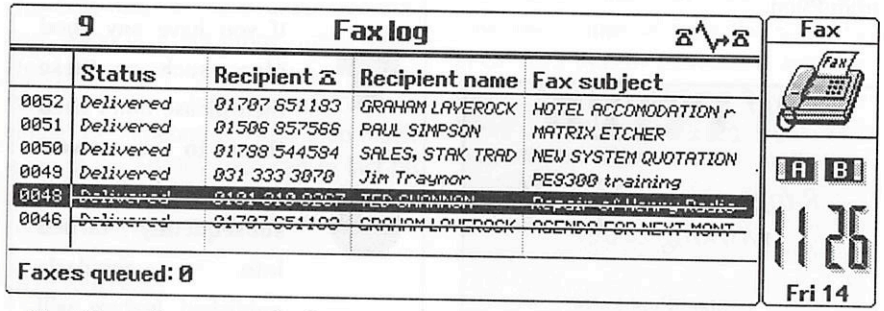
So start thinking!!

Living with the 3FAX

by Nigel Wright

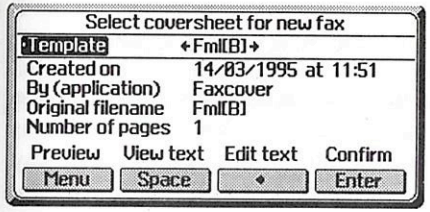


The *3Fax* looks very much like a half-size Series 3, the ribbed grey external appearance being a close match. One end has a standard jack for connection to a phone socket (depending upon the country in which you buy the unit) and the other has a cable with the familiar proprietary plug to fit the communications port on the left hand side of your machine. Psion also supply adaptors for different countries at extra cost. Power is supplied by two standard AA batteries, with the option to connect a Series 3/3a mains adaptor. As with the Series 3 there is a small green LED to show when mains power is applied.



The 3Fax software neatly showing the precise status of your fax transmissions

The 3Fax has two functions: it can send faxes at 9600 bps (Group 3), and as a modem it complies with V22bis (2400 bps) with MNP4/V42 error correction and MNP5/V42bis data compression. The memory limitations of the Series3a prevent the receipt of incoming faxes and also restrict operation to the 512K/1Mb/2Mb Series 3a's only.



Coversheet details

The 3Fax in use...

The 3Fax software is contained on internal ROM inside the 3Fax unit, and once connected to the Series 3a can be installed in the familiar time honoured manner using the *Psion-I* hot key combination. Once the application has been started the user has the option to install a local copy of the various software components on either SSD or internal memory. This allows creation and management of faxes even when disconnected from the 3Fax hardware. Unless a 1 or 2Mb Series 3a is being used it isn't advisable to install a copy of the software to the internal drive due to the large size of the application and the high system overheads required by it during operation. Merely starting the 3Fax application requires about 70Kb of free memory, and actually sending a fax increases this to about 160Kb. If you are using other memory hungry applications you will soon experience the dreaded 'No System Memory' message, requiring you to close down some of your other applications.

Set preferences
Default coversheet template... <None>
Drive for fax files B
Prompt for new fax on starting application No
'New fax' menu option goes to Address dialog
New fax created on "Print to Fax" Yes
Automatic deletion of document fax files No
'How to exit Phonebook' prompt Off
'How to exit Coversheet editor' prompt Off

Setting your preferences...

Choosing to install a local copy of the software onto an SSD presents the user with various options: 3Fax comes with the fax send/create application (133K), a coversheet-editing application (44K), a selection of coversheet templates (8K), some .PIC picture files (48K) that can be included in a fax document, an updated COMMS (and script editor) application and sample scripts for logging onto online services such as CiX.

Creating a fax

This is normally done in one of two ways:

Method 1

1. Create a coversheet containing a short fax message.
2. Enter recipient information.
3. Attach pre-prepared documents if necessary.
4. Either send the fax, or queue it for later transmission.

Method 2

1. Prepare a document on the Series 3a.
2. Set FAX as the printer type and print

the document to a fax file.

❸ Enter recipient information.

❹ Create a coversheet.

❺ Attach other documents if necessary.

❻ Send or queue for later transmission.

Coversheets can be created in much the same way as word processor .WRT templates. The coversheet editor can be accessed from within the 3Fax application, or as an application in it's own right. The message editor is very similar to WORD except that it allows the user to embed picture files anywhere in a coversheet. Picture files must either be in Psion .PIC or Windows .BMP (bitmap) format. Using a drawing package will also allow the user to create his/her own pictures for inclusion. It's also possible to scan one's own signature and convert the resulting bitmap into a .PIC file for inclusion in faxes as I have done. Psion offer an image capture service for those who don't have access to a PC or scanner, and for a nominal charge will convert logos or signatures into .PIC format for you.

As with WORD, faxes can be previewed to verify that you are happy with the layout before transmitting them. 3Fax also supports secure fax identities to help avoid unauthorised interception of transmissions. It is also possible to attach as many documents as desired, such as reports, spreadsheets, etc. With these tools at their disposal the user can quickly create sophisticated and professional looking faxes to rival the quality of those produced using desktop applications.

Once a fax has been sent the user has the option to tidy it (delete it). A tidied fax is crossed through in much the same way as a completed Agenda item. A useful function here is the ability to compress the fax log file in order to reclaim space.

Battery Life

Battery life with a set of Duracells is about 10-14 hours, and nicads manage around 8 hours at most. As with the use of the serial link, faxing is battery intensive. Psion offer their own rechargeable pack for the 3Fax but, I have no personal experience with it. 3Fax comes with its own battery monitoring function similar to that on the 3a, but this only measures usage pertaining to faxing. For that reason it's not terribly accurate if you use the unit in modem mode. Flat batteries manifest themselves in failed transmissions and a kind of burping sound when attempting to send!

3Fax User guide

As one might expect, the 3Fax comes with a clear and comprehensive manual of approximately 200 pages. It is a mine of information including a full list of Hayes commands, details of the 'S' registers and a useful troubleshooting chapter. It even has a section devoted to explaining the workings of data compression and error correction. All in all this is a very useful guide, and has provided the answers to all my questions.

Also included in the package is a free trial membership to CompuServe, which is slightly at odds with the lack of a supplied log-on script for it. Completion of the warranty registration card entitles the user to six months technical support via the 'hotline'. I have never needed it.

Summary

The 3Fax software is robust and sophisticated. It offers all the functionality most users will ever need, and the level of configuration control is amazing. It is easily the rival of many desktop packages and is an impressive example of programming, which ranks alongside AGENDA in performance. The whole package is so good that I now use 3Fax in preference to the package on my PC. As one would expect with Series 3 applications, full multitasking is retained whilst sending a fax, allowing you to simply continue working in other applications while fax transmissions or modem communications are in progress.

The single area where the 3Fax falls down is in the data transfer rate for modem (as opposed to fax) communications. The maximum speed of 2400bps is extremely poor performance these days, when low cost vfc/V34 modems are common and run at almost ten times this speed—to my mind there was no reason why the 3Fax could not have the same performance. However, this shortcoming is not as serious a handicap that it might appear, as no commercial off-line/on-line communications packages (like AMEOL and NAVCIS or WINCIM/MACCIM) exist at present and the limited memory of the 3a generally precludes the downloading of large amounts of data during connections to bulletin boards.

At a RRP of £199.95 including VAT the 3Fax appears relatively expensive, but the superlative software is almost worth the price alone. Having one's own personal fax certainly beats queuing for the already overloaded office fax machine!

Psion have done well with the 3Fax and I can personally recommend it. As a matter of interest, Psion have released the 3Fax software on SSD for use with third party modems. Unfortunately, at the time of writing this is only available in the USA, with no apparent plans for UK release.

Psion users wanted in Sussex area

One of our readers, Mr W R C Leet, would like to meet other Psion users in the Sussex area for discussions and exchange of ideas. If you are interested then please contact Mr Leet at the numbers given below:

Tel: (0424) 842014

Fax: (0424) 846003

The EMULATION Game

by Pete Sipple

...or how to make your IBM-PC think it's a Psion Series 3 or 3a. —confused, then read on...

What is an Emulator?

An emulator is a piece of software designed to allow programs from one type of computer to run on another. Emulators exist to run PC programs on the Apple Macintosh and the Archimedes, CP/M programs on the PC, and so on. Thanks to Psion, two emulators have been released to Series 3/3a users... EHWIM (Series 3) and S3AEMUL (Series 3a). These allow Series 3/3a software to be run directly on a PC. No such software currently exists for anything other than the PC, although the PC emulators can apparently be run on an Apple Macintosh, if the Mac' is in turn emulating a PC! Other computers such as the Amiga may also be able to achieve this when using its own PC emulator, though I cannot personally vouch for it.

Why use an emulator?

- On a fast PC, software will run considerably quicker on the emulator than on a Series 3/3a itself. Translating a 40k program took 73 seconds on my 512k Series 3a machine, and a mere 19 seconds on my 25Mhz 486SX PC.
- Using a PC keyboard and screen is a lot more convenient than the Series 3/3a when entering large amounts of data.
- Memory and disk space constraints should be a lot less of a problem on the PC, as the emulator makes use of all the available space on your PC's hard disk. The Emulator can thus be used to process files too large to import onto a Series 3/3a.
- The emulator can be used to demonstrate the merits of a Series 3/3a without the expense of actually purchasing the machine.
- You don't need to have your Series 3a with you in order to access your Agenda or Data files.
- The emulators are completely free, and are freely distributable.

History of the Psion Emulators

The Series 3 emulator first surfaced in 1992. The Series 3a emulator was released last year, although an 'unstable' version was circulated without Psion's consent towards the latter half of 1993.

The emulators were created by Psion's software development group for internal use only, but, as an experiment, the software was released 'as-is', to any interested party. It is a strictly unsupported product, and as the text file accompanying the software is clear to point out, Psion offer no technical assistance for it. If Psion find that their time is occupied by queries and problems regarding the release of the emulators, they may not release future software in this manner. The emulators do have certain limitations, and can be quite fussy about which machines they will run on, but the pros far outweigh the cons, and the emulators have proven themselves extremely useful to a large number of Series 3/3a owners.

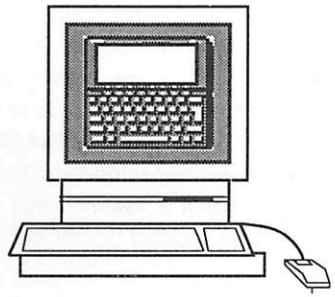
Limitations of the emulators

The Series 3 emulator comes with only three of the standard Psion applications, Time, Word and the programming module, which will disappoint users who wish to access their DAT or AGN files from their PC. The Series 3a emulator comes complete with all of the applications (except those unique to the new 1 and 2Mb machines). The Record application is included, although the audio playback/record functions won't work with the standard PC loudspeaker.

Psion are keen to stress that, as the internal workings of a PC and a Series 3/3a are considerably different, some commands and functions cannot properly be emulated. For this reason, software produced via an emulator should *not* be distributed unless it has been fully tested on an actual Series 3/3a. The fact that software may run on a PC emulation of the Series3/3a in no way guarantees that it will work flawlessly on a Series3/3a itself.

The major drawback caused by the difference in hardware is the emulator's inability to 'remember'. The contents of a PC's RAM (Random Access Memory) are lost when the machine is switched off, whereas the Psion's internal memory is preserved. This means that the emulators won't remember where they were the last time they were switched off, nor will they retain any of the custom settings made by the user. Any applications you install will be removed from the system screen when the program is run again, although settings can be preserved if you make use of one of the shareware macro programs, such as INSTAL14.ZIP.

Psion also point out that the emulators will only run on truly IBM-compatible PCs. The emulator is unlikely to run successfully on DOS emulations or inside 'DOS boxes' such as under OS/2 or Windows™. I am able to make the Series 3 emulator run successfully under



Windows, but have had no success with the Series 3a version under either Windows or OS/2. The Series 3a emulator takes up a considerable amount of the PC's RAM, and unless you have at least 4Mb available you may be unable to run it.

Installing an emulator

Unfortunately, the installation of the emulators is not terribly user-friendly. As the software is unsupported, Psion have not created an 'install' program, and so the user is left to make their own adjustments. The following notes, together with the software's text file, should help to make installation a little easier:

Before one of the emulators can be run, a one-off modification has to be done to your PC's setup. The following line must be added to your CONFIG.SYS file:

```
LASTDRIVE=M
```

Use your normal text editing program (such as DOS EDIT, SYSEDIT or Windows Notepad) to make the change to your CONFIG.SYS file, and then reboot your machine for the changes to take effect.

I have chosen to install my Series 3 emulator into a directory called C:\S3EMUL, and my Series 3a emulator into C:\S3AEMUL. If you already use a 3Link to backup your Series 3/3a to your PC you will have probably created a subdirectory for your Psion data. For the following listings it is assumed that your Psion directory is called C:\PSION.

As the running of the emulators requires the use of more than one command, I have found that the creation of a batch file has made use of them a lot easier. I have created two batch files in my C:\ directory, called S3.BAT and S3A.BAT.

Most PC users should be familiar with creating a batch file. For those unfamiliar with this, the easiest method is to type EDIT at the C:\> DOS prompt. This will start up the DOS text editing program. At the blank screen that follows, type in your batch file, and once completed, access the 'Save As' option from the 'File' menu. Enter the file name, i.e. S3A.BAT, and select OK. Then exit 'EDIT' via the 'File' menu.

The batch files make use of the SUBST command, which is used to re-route where the emulator looks for the A:, B: and M: drives. As a PC normally has no M: drive, it needs to be 'fooled' into believing that the C:\PSION directory on your hard disk is actually the M: drive.

Listings for two proposed batch files follow: note that the comments in parentheses are for guidance only and should not be typed in.

Once the appropriate batch file has been created, type in either S3 or S3A from the C:\> DOS prompt, and you should be greeted by a familiar sight.

When the emulator starts it will make very frequent accesses to the floppy disk drives and, if your drives are empty, they can make some nasty mechanical noises. You may decide that you want to SUBST your A: and B: drives to a less noisy location. Inserting the following lines before the program execution line will redirect the floppy drives to a temporary directory on your hard disk:

```
SUBST A: C:\TEMP
SUBST B: C:\TEMP
```

It is important to remember to un-SUBST after using the emulator, otherwise you will not be able to access your real PC's drives!

S3.BAT - DOS Batch file for Series 3 emulator

```
SUBST M: C:\PSION      (tell the Emulator where your Psion M: drive should be)
CD\S3EMUL              (Change to the directory containing the emulator)
C:\S3EMUL\EHWIM.EXE          (Run the emulator)
SUBST M: /D                  (undo changes before exiting)
CD\
```

S3A.BAT - DOS Batch file for Series 3a emulator

```
SUBST M: C:\PSION
CD\S3AEMUL
C:\S3AEMUL\S3AEMUL.EXE
SUBST M: /D
CD\
```

Obtaining an emulator

Both the Series 3 and 3a emulators are freeware. They can be obtained from any of the usual Psion shareware sources, from CiX and CompuServe, and from the FTP archive (for those with Internet access). The names to look out for, are:

S3AEMUL.ZIP

Complete Series 3a Emulator (790k approx.)

S3AEM1.ZIP
Series 3a Emulator (No text file)

S3AEMT.ZIP
Series 3a Emulator (Text file only)

S3EMUL.ZIP
Complete Series 3 Emulator (320k approx.)

EHWIM.ZIP
Series 3 Emulator (Main file only)

S3EMUL.TXT
Series 3 Emulator (Text file only).

Competition Results

In response to the competition in the last issue asking for the TEN things Psion SHOULD have incorporated into the new 1 and 2Mb Series 3a machines, here's the winning entry from Paul Lippi:

Paul says "The following suggestions emphasise short-term improvement—none entails new technology."

1. **A non-slip housing**—perhaps the housing ends alone could be covered with a non-skid rubber, like that used on the existing feet.
2. **Shock resistant, water resistant, rigid moulded plastic sleeve case with an integral belt clip**—maximal protection while adding minimal bulk to the present perfect form factor.
3. **A detachable wrist security strap**—for those who use their Psion while standing.
4. **Safe screen cleaning fluid.**
5. **A more robust serial port connection and battery ribbon cable**—to minimise soft resets.
6. **A less bulky serial link**—at least a shorter cable.
7. **An external headphone jack**—for learning vocal music parts on Widget's *'Compose'* software without annoying others.
8. **Non-labelled application touchpads**—this would be more elegant than reassigning your favourite applications to touchpad buttons with completely irrelevant icons.
9. **More configurable ROM software**—quick skipping in the *Spell Checker*, and more flexible browsing in the dictionary.
10. **Utility applications built into the system ROM**—applications routinely accessed by the majority of serious users should be built-in. Minimally these utilities should be a macro system, file compression, text viewer (for files above 40K in size), a graphics viewer and an icon editor. They could be chosen from the best existing shareware and freeware.

Paul Lippi
Jerusalem, ISRAEL

Paul earns two free issues added to his subscription - Ed.

Apology

For any readers who have written in to Palmtop but haven't yet received a reply, then please bear with me—I'm buried in work at the moment, but WILL respond to you in the near future.

Thanks - Ed.

"On The Net"

The latest gossip from the Information Superhighway

Once again Pete Sipple has been watching the discussions taking place in the various on-line Psion conferences. In this Issue's 'On the Net', we take a look at some examples of prompt problem solving, what to do with a broken Series 3, and the anticipation generated by the imminent arrival of a new Psion product...

PsiWin, as reviewed in the last issue of Palmtop, is a Windows™ based file transfer and conversion program. Psion's April '95 Support Bulletin stated that it would be available from May, with advance orders being welcomed. Until its very recent appearance it's (slightly late) arrival was eagerly awaited...

"Having paid for and ordered my copy of PsiWin many weeks ago (by cash in person) I am now getting excited by the thought of receiving it shortly. Does anyone from Psion have any information regarding shipping dates? I know that it was scheduled for May/June. Is this still the case? I keep looking out for the postman with the package! "

(akt@cix.compulink.co.uk)

"PsiWin sigh... Many weeks ago I sent an order for PsiWin. When I noticed the clause that said delivery may take 21 days I assumed that it was a hang-over from the three day working week in the 70's. Has anyone received their PsiWin yet?"

(stejohn@cix.compulink.co.uk)

"Who's going to get it first though? - that's the question! Whoever it is will have to keep quiet about it or answer a barrage of questions on what it will and won't do. Plenty to talk about on this forum for a week or two! The latest info from Psion Customer Support in the UK is that PsiWin will be launched on Friday June 9th.

(JohnRodda 100260.2231@compuserve.com)

"It might be launched, but when will it be available?! I notice in July's Personal Computer World that Psion are advertising PsiWin. A little premature I think."

(Ian Hunter 100125.3225@compuserve.com)

"According to SDL, one of the main suppliers of Psion gear - it's available from about 23rd of June - can't remember the exact date, but it's definitely towards the end of the month."

(Philip Andrews
100333.1733@compuserve.com)

"... And people complain when Psion don't announce products 'till they have been on retailers' shelves for 2 days. It seems that you can't win the public relations battle."

(millar@cix.compulink.co.uk)

"Psion seems to take this approach to the other extreme at times. I never did see an 'official' announcement of the 1Mb or 2Mb 3a on this forum prior to its launch - as a result, by the time I placed an order from here in Hong Kong I was months behind on the waiting list. Come to think of it I have never seen an 'official' marketing update from Psion. How about it? Another possible advantage to Psion of giving more timely information on products is that it might help to give your marketing department a better indication of potential demand - they sure got it wrong with the 2Mb units! As for PsiWin, I have still not seen any official announcement or feature-list of this product here, although there have been dozens of messages about it. However I was openly given Psion's official glossy brochure about the product at a recent Computer Show out here in Hong Kong - of all places."

(Andrew Mallard
100010.3413@compuserve.com)

What do you call yours?

"What is the correct pronunciation for PSION? I was originally told that the 'P' was silent, pronounced 'sigh-on'. Recently I heard someone call it 'pee-zeon' which sounds reasonable too. Anyone know for sure?"

(Colin Bosch 73043.241@compuserve.com)

"It has a silent 'P' (as in bath). The pronunciation 'sigh-on' is correct."

(Ian Hunter 100125.3225@compuserve.com)

"My boss says that when the Psion Organiser first came out they transposed the 'I' and 'S' !!!"

(David Kimberlin-Wye
100542.3530@compuserve.com

">> I like the 'I' and 'S' transposition pronunciation best. << Why? - It's a description of what the Psion does to the competition!"

(Ian Hunter 100125.3225@compuserve.com)

"Last year, a retail salesman in the U.S.A. claimed he was taught to say 'Pie-zahn' (using American phonetics, of course). Ah, but what does it mean? Same thing as Haagen-Dazs?"

(kenton@freenet.scri.fsu.edu)

"The rumour is that it came from 'Potter Scientific Instruments' (David Potter, Psion's founder and Chairman-Ed), to give the 'PSI' and they added the 'ON' to round it off into a sort of 'word'."

(joegriffin@cix.compulink.co.uk)

Much publicity has been made in recent years regarding computer viruses, malicious programs that infect computers and spread via floppy disks, networks, etc. Could your Series 3 become infected?

"Virus alert! That got your attention! People keep asking me how likely it is that a virus could appear for a Psion. I keep saying something along the lines of 'It could appear, but it would be fairly easy to defeat, so I'm not sure an author would bother writing one'. Is this about right?"

(slitchfield@cix.compulink.co.uk)

"I think the consensus has been that since the machines don't actually boot from anything and are running all the time, it would be difficult to do."

(rovoreed@cix.compulink.co.uk)

"Well, bearing in mind that any 'virus' would have to be masquerading in another program first, once discovered it would be easy to halt it spreading. However, if some evil author did hide a virus in an innocent looking program it might be somewhat difficult to spot. I wouldn't dismiss such a thing out of hand, but it's unlikely that the people with the necessary knowledge are the sort of people who would do something like this."

(baldwina@cix.compulink.co.uk)

Here is a good example of the speed at which queries can be resolved over the 'net'. This question received an answer within hours...

"The emulator program. Does anybody know how to increase the image of the Psion screen on your PC screen?"

(Andy 100605.2131@compuserve.com)

"To configure the Emulator to change the screen size you need to edit HHSERVER.PAR. Change the SERVEWR_PARAMS -X and -Y parameters to the size you require (640 and 480 will make the screen fill the Monitor)."

(John Boyce
100014.1240@compuserve.com)

"John - Thanks for your advice. I can, as you say, now view the Psion screen image full-width on my PC. I am new to both the Psion and the Net, but am learning fast. This is a great system, and to be able to pose and answer questions like this is a real bonus. I hope I will able to help somebody one day. Thanks! "

(Andy 100605.2131@compuserve.com)

Another example of the instant question-and-answer service that the 'net' offers for Psion users...

"Has anyone come across a screen capture program for the 3a? I am writing a brief article on the Psion and wanted to illustrate it with a screenshot. I have downloaded SCAPT.ZIP which was designed for the Series 3, but it does not cope with the better graphics of the 3a."

(Amrit Takhar 100060.42@compuserve.com)

"Perhaps you already know that on the Series 3a you can capture the screen by

pressing <Control-Shift-Psion-S>, and the image will be saved as 'SCREEN.PIC' in the root directory of the Internal disk?"

(Dennis Lefebvre
71660.1273@compuserve.com)

"Thanks for the tips from yourself and Neil Bee. I have managed to get the screen shots I wanted using your Ctrl-Shift-Psion-S key combination. Using Winlink, I then moved the SCREEN.PIC to a directory on my PC. In this directory I ran the converter program WSPCX to produce the PCX file I wanted!"

(Amrit Takhar 100060.42@compuserve.com)

Of course, some queries are easier to solve than others. Here's an example of the Acronym RTFM (Read the 'Friendly' Manual) in action...

"I've looked through the files and all the other scraps of OPL examples, system calls ,etc., yet I can't find any call to simply turn the Psion off in OPL, which of course is what I need to do! Do any of you who are wise in the ways of system calls, etc. know of a way to do this? Your help would be greatly appreciated."

(address withheld)

"Erm... there's an OPL command for turning the Psion off. The command is OFF x%, where x% is the number of seconds to turn off for. I'm determined not to say RTFM just in case you didn't have an FM to R!"

(kev@denali.demon.co.uk)

"Try the OPL command OFF! Sometimes it is hard to see the wood from the trees."

(alim@psioninc.com)

A useful tip for those who make use of the Series 3a's sound recording utility...

"I have a Series 3a. When I play my own recorded samples I hear a 'noise' signal. This even happens on samples without any recorded signal. Do I need to send my 3a for repair ???"

(dc93kkp@brunel.ac.uk)

"No. The noise is electrical interference, probably from the DC-DC converter power supply. If you make recordings using external power, then that will vanish. They're all like that."

(alanr@rd.bbc.co.uk)

"You'll find you get a 'buzz' on playback of any sample recorded using batteries only. Record using the mains adaptor and there's no problem."

(Steve_Robson@redac.co.uk)

Following on from Nigel Wright's article in the last issue of Palmtop, one technically minded Series 3 user seems to have found the answer to the problem of battery replacement...

"I was looking at solar cells providing 9V up to 50mA in bright light in the Maplin electronics catalogue. Has anyone successfully used solar cells with their Psion, and where did they procure the said cells? It would save a lot on batteries and be nicely portable."

(arjm@dcs.ed.ac.uk)

"I have actually got a solar panel for my Psion 3a. My local electronics shop had picked up some surplus stock from somewhere and it included a box of 300mm square solar panels, these were rated to provide 12V at 200mA. I designed and built a simple circuit using an LM7809 regulator, a Ni-Cd PP3 battery and some other stuff to produce a stable voltage suitable for the Psion. I have found that if the sun is bright enough to cast even the slightest shadow then the panel will run the Psion, and on sunny hot days there is even enough power left over to run a 12V equipment cooling fan to provide a nice cooling breeze for me and the Psion."

(jordandc@sun.aston.ac.uk)

In the event that your Series 3 develops a fault, machines (within the UK) should be returned to the Psion Repair Centre in Greenford, Middlesex. From the messages posted on the 'net', it's clear that their repair service is prompt and efficient.

"Broken Psions. How long do Series 3's take to come back from Greenford? The icon bar on mine has died. How will I survive? I can cope without the data - I'll just miss the alarm clock!"

(snuffy@cix.compulink.co.uk)

"I dropped my 3a the day before going to the U.S. on business and broke part of the hinge mechanism - I pleaded with a very helpful young lady on the reception at Psion service, who told me to come down and she'd have a word with an engineer for me. Paul Pinnock came down when I arrived and had me up & running inside 10 minutes. Result: Very happy and relieved customer with life intact again. Verdict: Can thoroughly recommend Psion Service and Mr Pinnock!"

(zebraman@cix.compulink.co.uk)

"I managed to do a rather large drop test on my S3a last week and broke the hinge on one side of the lid. I sent it off and they fitted a new case (evidently they always replace the entire case, repairs are more expensive). The total cost was £40 + £3.50 for registered post, pretty reasonable. It arrived back today, as good as new. Eight days from my posting to its return is quite impressive."

(bhall@cix.compulink.co.uk)

In Palmtop Issue 2 we looked at ways for night-time Psion users to illuminate their displays. The suggestions keep on coming...

"I just got hold of a Zelco 'Long Reach Flexible Flashlight' and so far I like it (well, anything at this point beats a lamp held between my teeth.) It can probably be best described as a gooseneck lamp that fits in your pocket. It even has a clip to fasten on to your belt (for the Batman utility belt look) or in your shirt pocket (for the ever-popular 'no this isn't a pocket protector' geek look. <grin>) Now if someone could persuade Zelco to modify the clip to fit the Psion better, this would be a next-to-ideal solution to our backlight problems. (For what it's worth,

the clip is a separate piece of plastic that screws on.) It also helps if you're on public transport late at night, as it doesn't disturb sleeping passengers too much. I was on a bus out of New York city late one night and I almost got kicked off the bus trying to work with the overhead light. I tried using my flashlight but still got a lot of objections."

(Barry Childress
73510.1420@compuserve.com)

"I think I know the type of lamp you mean, thanks for letting me know of your experiences with it. I actually made a small frame with LEDs mounted on it, but it looked way too tacky! I wouldn't mind clamping the lamp between my teeth, but I worry about consuming all the black paint that gets chipped off, oh and it makes me drool!"

(Neil Bee 100422.1164@compuserve.com)

(I was toying with the idea of incorporating a jokes section in Palmtop, but certain parts of 'On The Net' already appear to have filled the rôle nicely - Ed.)

And finally, some feedback on Issue 2 —from our very own 'palmtop_mag' conference on CiX...

"Issue 2 - Got mine this morning. A very good mix of articles, reviews, programming, etc. Enough to interest the beginner, with enough for the more serious user. My only concern is how you manage to maintain the quality in the future. You have a lot to live up to!!"

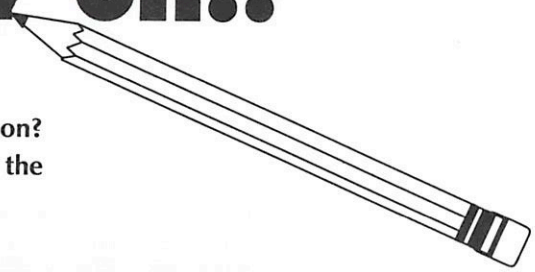
(gcoxhead@cix.compulink.co.uk)

"After reading through Issue 2, I have to agree. I very much liked the improved quality. The article on JBData/DataDeLuxe/DataView was excellent and gave everyone a clear idea of the respective merits of these three. In my opinion, it is excellent, and if supported will get even better as people contribute their own articles, views, etc. Looking forward to Issue 3."

(dagriffiths@cix.compulink.co.uk)

Pete Sipple
(psipple@cix.compulink.co.uk)

Something to DRAW on..



Thinking of attempting a little artwork on your Psion? Here's a look at some of the available software...

by Steve Clack

Before embarking on a discussion of drawing packages for the Psion palmtops I must say that these little machines are really not the ideal platform on which to compose artwork of any great complexity. This is largely obvious simply by virtue of the small screen size and lack of a mouse or other pointing device—however the full extent of the difficulties can only be fully realised once you have actually attempted to construct an illustration of reasonable complexity for yourself. By 'reasonable complexity' I don't refer to the draughting of a house extension or even simple DIY plans. Sadly the Series 3/3a cannot hope to support that kind of project.

The limitations of the small screen are numerous: if you wish to draw either a single large object or several small ones then you are obliged to scroll endlessly around the screen to locate the part you are working on. In addition, positioning of objects relative to one another becomes difficult, as you can't see everything on the screen at once. The lack of a mouse slows down the whole drawing process as you then have no way to quickly move or reshape objects. I am generally no great advocate of the mouse, preferring to learn alternative keyboard shortcuts where possible. However graphics software is one instance where the mouse is most certainly the most efficient way to work—incidentally, don't laugh at the concept of using a mouse with your S3, as apart from the compromise to portability the whole thing is quite feasible from a technical standpoint.

Once the possible frustrations and limitations are taken into account, there are still a number of drawing operations where the Psions can still be of use: particularly when creating rough schematic drawings, little maps and plans, drawing icons for your Psion, or

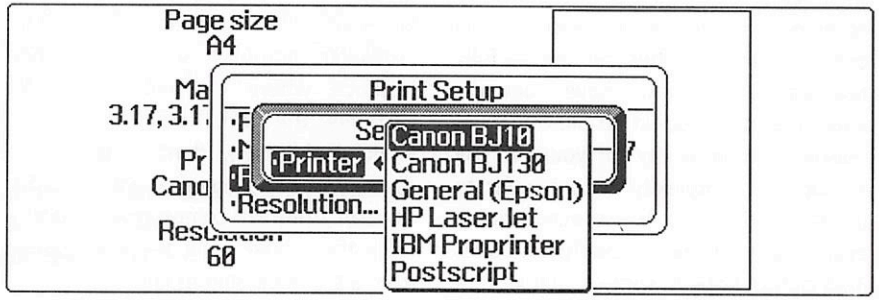
simply just for the fun of a little mindless doodling. Provided that you go into the selection process with realistic expectations then an appropriate drawing package can be a very useful addition to your software portfolio. Here are five of the most popular programs:

Paint 2.01F

Purple Software's *Paint* package is really my initial point of reference for Series 3/3a drawing software. I purchased it a few years ago now, before I was even aware of the existence of useful shareware. I bought it not to actually create drawings 'from scratch' on my Psion, but as a means of importing Windows™ .BMP or .PCX files from my PC at work. This was to allow me to view engineering drawings (imported initially from a CAD system) or simple schematics for general reference.

varied in order to set the thickness of lines or plotted points, but it offers no drawing tools beyond this. In common with most of Purple's other graphics software it has a basic print preview feature to show the outline of where the picture will appear on a printed page, and together with its 'sister' program, *DrawIt*, offers the most comprehensive printer support of the entire group.

I confess that having now used all five packages reviewed here, I will probably continue to use *Paint* as always. I have no serious requirement to draw directly on the 3a, only to use externally created graphics and to export 3a screen dumps for publication in *Palmtop*. *Paint* does all of this very well. For new users, *Paint* compares poorly with most shareware offerings costing a quarter of its price—except in the areas of printing, import/export, and in sheer simplicity.



One of *Paint*'s main strengths—a decent set of printer options

When it comes to features, *Paint* is the poor relation of the group tested here—offering little more than simple box, line, circle/ellipse and text tools, plus some basic fill patterns. The 'pen' width can be

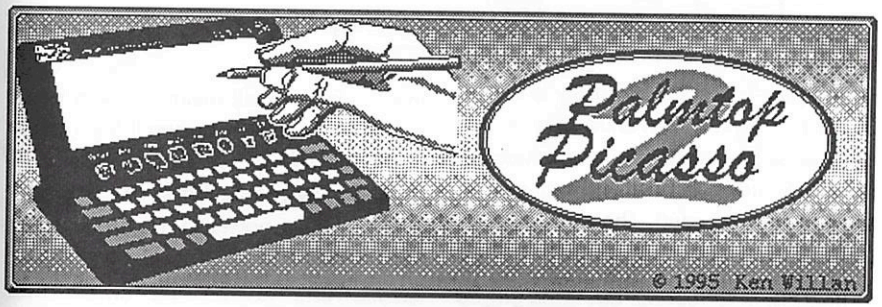
Palmtop Picasso 2.0d

Palmtop Picasso is not for the faint-hearted. A complete installation (including several optional components)

takes almost 200K of disk space. It also swallows almost 100K of memory while running.

All of this resource usage is not without its benefits though. If you are willing to take a little time to get to grips with *Palmtop Picasso* then your efforts can reap some real rewards. Apart from the simple stuff such as straight lines, rectangles and circles, *Palmtop Picasso* comes with a complete arsenal of drawing (and other) tools.

things. It also managed to hang the whole machine on one occasion, forcing an irritating 'paper clip in the hole' soft reset. At this point I adopted the age old technique of 'if all else fails, read the manual', and proceeded to wade through the voluminous on-line help screens. These cover more than 50 topics, and if you take the time to digest all their wisdom then you'll at least then be proficient with *Palmtop Picasso*. As the author mentions, some of the help topics are not



Impressive right from the start—*Palmtop Picasso*'s opening screen

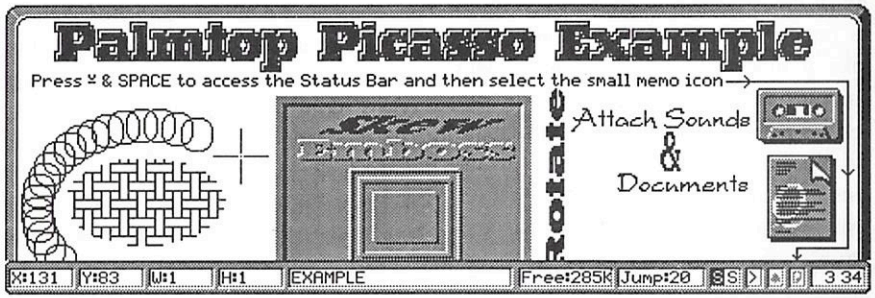
The capabilities of *'PP'* are not without their price. As the supplied documentation honestly states, "It takes a while to get to grips with how *Palmtop Picasso* works. If you want *Palmtop Picasso* to do something, then it probably can." This statement from the author, Ken Willan, really sums up the whole package in a nutshell. My first half hour with *'Picasso'* was largely an exasperating experience—without first reading the extensive on-line help files I was constantly getting myself into menus and options I then couldn't get out of, and had to close down the program every few minutes just to reset

completed in the current version, but are a high priority for completion in the near future.)

'Picasso' offers most of the drawing tools from all the other four programs combined. It handles circles, ellipses, lines, triangles, polygons, parallelograms, boxes with selectable corner radii and silhouettes, and it gives variable line thicknesses, a spray gun effect, numerous fill patterns for solid objects, the ability to skew or emboss objects for a decorative effect, and more. This is undoubtedly the most sophisticated of the packages

reviewed, and though I didn't personally find the user interface very intuitive it is nonetheless very professional looking.

Overall then, *Palmtop Picasso* is the most difficult-to-learn of the five programs, but is also the most powerful. If you're looking for a quick means to bash out a few simple schematics then it is probably not for you. If you have ambitious needs, or find that your existing drawing software is under powered, then you really should give *Palmtop Picasso* a try.



Some of the extensive features of *Palmtop Picasso* on display

The author has quite obviously endeavoured to provide a program that boasts every possible feature on a machine of the 3a's limited processing power, and he has largely succeeded. The depth of this package even extends beyond the realms of graphic capability, with items such as an on-screen clock, a permanent display of free memory, and even the possibility to attach sound or note files to a drawing. It also incorporates a full icon designer and a limited animation facility!

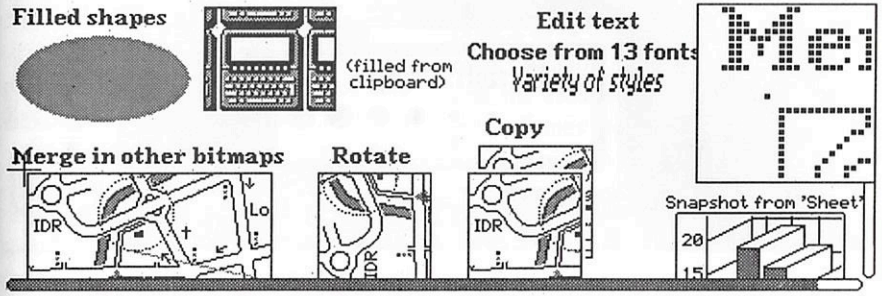
Though my continued efforts with *Palmtop Picasso* did succeed in reducing my frustration (and increasing my respect for the ambitiousness of the project), I still had it 'bomb out' on quite regular occasions, requiring me to exit the program and re-start. Though this may have been due in part to my own particular setup and methods I always felt that *Palmtop Picasso* was the least 'stable' of the packages reviewed.

Draw 2.82ß (Beta version)

'Draw 2.8' is currently in the latter stages of its 'beta' testing programme. It is due for full release any time now, and has therefore been included in this review. Similar in operation to all but *DrawIt*, it has the obligatory array of basic drawing tools, allowing the construction of straight lines, rectangles (boxes), circles, ellipses (ovals), and to optionally 'fill' objects with one of several selectable patterns.

Perhaps the most striking feature of *Draw 2.8* is its ease of use. In contrast with *Palmtop Picasso,* I felt comfortable with *Draw 2.8* within a few short minutes of first running it. The program is used by simply positioning the cursor where you want to start drawing, selecting the desired drawing tool, using the arrow keys to size or position the image, then pressing 'Enter' to finish. My favourite feature is the variable-size zoom box that appears in the corner of the screen. This provides a close-up view of the area surrounding the cursor, and allows minute and precise changes to be made to a drawing without fuss or tedious switching of modes. Each pixel (dot) can be individually toggled on or off (in grey or black) just by moving the cursor to the desired 'dot' and 'switching' it with either the 'Enter' key or the space bar. This feature is immensely useful, is very well implemented, and can be turned off when not needed.

As with all other packages, cursor movements across the screen can be made either dot-by-dot with the four arrow keys, or in larger increments by combining the arrow keys with the 'Shift', 'Control' or 'Psion' keys. *Draw 2.8* again scores on ease of use here, by allowing the user to define four 'jump' points on the screen, each of which can be accessed with a couple of keypresses. This gives a quick way of traversing the screen without endless pressing of keys. All the programs allow the effective drawing area to be larger than the actual screen size, but only *Draw 2.8* gives on-screen scroll bars to show whereabouts on the page you are currently working.



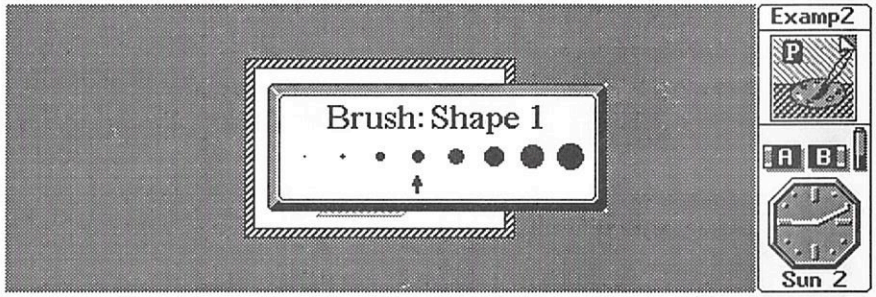
Draw 2.8, and that *GREAT* zoom window (top right)

As with all the others, *Draw 2.8* does suffer certain limitations: curved lines can only be created by 'plotting' them pixel-by-pixel, or by cutting and pasting bits of previously drawn circles or ellipses. *Draw* will also not support the drawing of polygons—except by manually placing individual straight lines, which is a very slow process.

As the author, Rick Andrews, states in the accompanying read-me file, *Draw* was conceived as a program to match the 'feel' of the Psion's built-in applications, and to be as easy to use as possible. This ethos has really paid of, with *Draw 2.8* being quick, easy and functional in

almost every area of its operation. Despite the limitations of this (and the other programs) at least with *Draw* you know that ANYTHING can be done at a pinch—by using its zoom feature to create or modify your work a pixel at a time.

use and features. It generally functions in a similarly intuitive way (for me, at least) to *Draw 2.8,* and adds a few extra useful functions, such as a neat way of drawing polygons or curved lines (Bezier curves), by constructing them point-by-point and defining the style of each point or node.



Selecting brush shapes in PicPoc

As with *Palmtop Picasso, Draw 2.8* does not directly support the import and export of anything but Psion-standard .PIC files, but instead it cleverly interfaces with Andrew Baldwin's (yes-OUR Andrew Baldwin!) *FirePic* utility. *FirePic* comprises separate DYL (DYnamic Link Library) files to allow the conversion between Psion .PIC files and other graphic formats such as Windows .PCX. *FirePic* is available separately as shareware, and although it currently supports only .PCX files, a number of other conversion formats are planned for the future.

PicPoc 2.41a

PicPoc, or PICtures in my POCket, by Berthold Daum, has many similarities with *Draw 2.8* in terms of both ease of

The technique takes a little effort to get the results you require, but is an important tool sadly lacking from all of the other programs reviewed. On the minus side, *PicPoc* has no zoom feature, which makes very precise changes to a drawing more difficult. It also lacks the ability to flip or rotate a selected part of the drawing.

DrawIt 1.00F

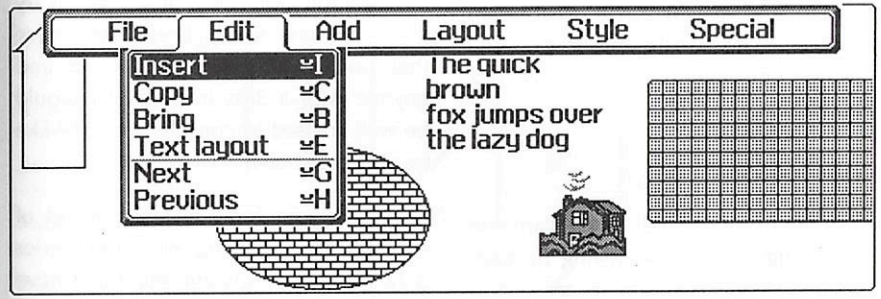
DrawIt, like *Paint,* is a creation of *Purple Software*. Why would they produce two separate drawing packages? Simple. Because unlike every other program on test, *DrawIt* is a 'vector' drawing package, rather than a 'bitmap' type. The fundamental differences between the two types are that anything 'drawn' with a bitmap editor cannot later be re-edited

as a single object. Thus if you create a square box and later draw a circle in the centre of it, there is no way to then 'pick up' the circle and re-position it away from the square. The only option with a bitmap editor would be to 'draw' over the circle to hide its presence 'on top' of the square, and then to completely re-draw a new circle in the new position.

The beauty of a 'vector' drawing program is that each separate object retains its own 'identity' at all times. Vector software such as *DrawIt* would not only allow the circle to be freely moved relative to the square at any time, but the circle could also be moved behind the square too. This level of flexibility is what serious users want, and indeed this is the

DrawIt's case), they then appear on the drawing 'page' ready to be positioned and sized. All shapes can be adjusted to any size, then stretched and pulled into a different aspect ratio as necessary. A rectangle can therefore be made into a square, an ellipse into a circle and so on. As well as objects from the 'shape library', *DrawIt* also allows multiple objects to be grouped into a single entity, objects to be filled with various patterns, object rotation in 90 degree increments, and the creation of text within rectangular 'frames' (much like a conventional desktop publishing package).

DrawIt can also import .PIC files as complete objects. This importing of files gives the only means of working with



The drawing package that dares to be different—DrawIt

way that all but the most basic desktop computer-based drawing packages work.

For those familiar with Purple Software's Flowcharting or Organisational charting packages, *FloChart* or *OrgChart, DrawIt* works in exactly the same way—every object you wish to include must be selected from the shapes available (21 in

irregular shapes from within *DrawIt,* as the program will not allow direct pixel-level editing. This is sadly a major and overriding limitation when using *DrawIt*. The built-in shapes are limited to various rectangles, polygons, ellipses, straight and diagonal lines, curves and arrows. If the object you want to draw doesn't fall into one of these limited categories then your

only option is to create that object with another software package and then import it into your *DrawIt* file. This further detracts from the flexibility of *DrawIt*, as such imported images cannot be re-sized in the same manner as the standard shapes, only cropped from their right or bottom edges.

Despite these limitations, *DrawIt* lends itself very well to creating simple schematic 'block' diagrams in a hurry. The ability to move and reshape objects at any time removes the need to endlessly 'rub-out' and re-work parts of a drawing that need adjustment. The ability to reshape text blocks and move them relative to graphic images offers a rudimentary kind of desktop publishing capability. This could be particularly useful for anyone with a *3Fax*, as it should be possible to create rather polished looking composite pages for direct fax transmission.

Conclusions

In summary, I would advise anyone considering a graphics/drawing package for their Psion computer to try out as many of the available packages as possible before making a decision.

Three of the five packages review are shareware anyway, so it is easy to 'try before you buy' in these cases. Space limitations have prevented me from going into any great detail on the full features of the five programs, and at least one program has been skipped completely—notably DRAWS3A, which offers generally similar features to Purple Software's *Paint* program, but without the extensive printing or import/export options. At a cost of £20 for registration this program appeared to have little to offer beyond the five programs reviewed here and has therefore been omitted.

Like the comparative database review in the last issue, there is really no obvious winner amongst the ranks of the programs considered. Each has its own features and benefits, and will appeal to different people for different reasons.

Realistically, many users will simply try out all the shareware packages before picking one of those. As it's not possible to try out either of the commercially available programs before buying then most people will sadly never get to try them out first hand. These both have their undoubtable strengths though, and anyone with a *3Fax* in particular would be well advised to consider the DTP-like qualities of *DrawIt*.

Whatever your foray into the world of graphics and drawing with the Series 3/3a computers it is important as I have said to have realistic expectations of the capabilities of both the hardware and the software. I quite expect that the creation of graphics on handheld computers will be a rather clumsy process for a few years to come. If you have access to a full-sized computer for most of your graphic work then do yourself a favour and use that rather than your palmtop.

Happy sketching!

Comparitive performance and features - Graphics/drawing programs

Features included:	Paint	'Picasso'	Draw	PicPoc	DrawIt
Straight line drawing	✔	✔	✔	✔	✔
Curved line drawing	✗	✗	✗	✔	✔
Box/rectange drawing	✔	✔	✔	✔	✔
Triangles/polygons	✗	✔	✗	✔	some
Circles/ellipses	✔	✔	✔	✔	✔
Fill objects with patterns	✔	✔	✔	✔	✔
Multiple text fonts	✔	✔	✔	✔	✔
Variable line thicknesses	✗	✔	✔	✔	✔
Dotted/dashed lines	✗	✗	✗	✗	✔
Adjustable cursor style	✗	✔	✔	✔	N/A
Spraygun effect	✗	✔	✗	✔	N/A
Zoomable views	✔	✔	✔	✗	✗
Rotate/flip images	✗	✗	✔	✗	✔
Built-in icon editor	✗	✔	✔	✔	✗
File import/export	BMP PCX GIF	via FirePic	via FirePic	none	BMP
PRICE (inc.VAT)	£49.95	£15	£10	£25 approx.	£34.95

'Paint' is supplied on SSD together with *'Compose'*, a simple musical composition program and runs on both Series 3 & 3a machines. Others run on 3a's ONLY.

'DrawIt' is £34.95 on floppy disk, but can be supplied on Flash SSD for £49.95.

'PicPoc' is priced at $49.95 Australian Dollars plus P&P.

Printing facilities are limited on all programs, though Paint and DrawIt allow printing to most common printer types. Users are advised to check that their printer type is supported before purchasing any software.

Hints & Tips

This section of Palmtop is currently rather undersubscribed! Surely everyone has at least *one* good tip to pass on to other readers? Anyway, in an attempt to encourage some more contributions for the next issue, we are offering a FREE copy of Psion's new *SoundMaster* software (reviewed on page 10) to the best tip for issue 4. Please send all entries to the usual address (see page 2 for details).

The magic cursor

Can't find your cursor in Word? Just press Shift and the left or right arrow key to highlight the character next to the cursor position—simple isn't it?

Poppy Holden
London

Navigating your Agenda

The 3a's built-in Agenda application is endowed with a rich set of features, and can sometimes be a little daunting to the beginner. Here are a few tips to help find your way around it more easily:

» If you don't regularly use some of the alternative 'views' (I rarely use the Anniversary view), then you can use the 'Set up ◆ list' option under the diamond menu to remove the lesser-used ones from the list. Once this is done, the selected views will no longer appear when you use the '◆' key to cycle through the six views.

» Pressing the 'Esc' key will always toggle between the current view and the last view selected.

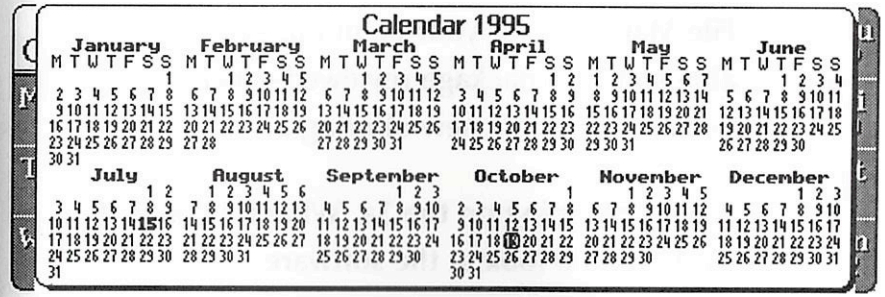
» Hitting the space bar will always toggle between today's date and the last date selected.

» Hitting the 'Tab' key in any view brings up a calendar box showing the month you are currently viewing. Similarly, a second press of the tab key will change this to a three month calender, and a third press will show the whole year on screen. Alternatively, 'Shift-Tab' will invoke the three month calendar and 'Control-Tab' will show the year calendar.

» If you use the arrow keys to move around the resulting calendar and then press 'Enter', you will be taken straight to the selected date in the current view.

» The 'Home' and 'End' keys will move you forwards or backwards a week at a time in *Day* and *Week* views, and to the beginning or end of the selected month when in *Year* view.

given time, and each one can be independently configured. If you use a lot of alarms to remind yourself to take medication or for regular appointments, then you may wish to keep these in a separate Agenda file. This makes them easier to view, and you can temporarily silence them all (apart from the *next* one—see above) simply by closing down your 'alarm' Agenda.



A handy calendar at the press of a button—well, three actually

» In conjunction with the 'Control' key, the left and right arrow keys will move you forwards or backwards in 7 day increments while in *Year* view.

» Pressing the 'Delete' key will always erase the current entry in any view—after first prompting you to confirm the deletion. When deleting repeated items you are also given the option of removing either one or all occurrences of the event.

» If you close down the Agenda for any reason, then be aware that only the *very next* alarm will be sounded. All subsequent alarms will be ignored until the Agenda file is re-opened.

» Remember that you can have any number of Agenda files running at a

» As with the built-in database application, deleted Agenda entries continue to take up valuable space until you 'Compress' the file using 'Psion-K'. Get in the habit of doing this on a regular basis to avoid your Agenda files becoming large and unwieldy.

Steve Clack

Next Issue...

Planned for issue 4:

- File Managers for your palmtop. Every available software package reviewed—including Purple Software's new offering...
- Project planning on the 3a. What it is, how it works, and a look at the software
- Comparisons of the best cases, wallets and pouches for your precious palmtop and accessories
- Would you like to read novels on your Psion? Well you can! We look at what software to use, and where to get the 'books'
- Reviews of the latest and best in software, including a look at shareware on CD-ROM, the latest version of Mapper, and more...
- All this PLUS the usual features, and some brand new ones too...